JULY 6, 1946

Railway Age

Founded in 1856

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GENEVA COLLEGE

"Rocket Freights" pace the fast cargo field

LAST November "Rocket Freights," powered by 4,050 H.P. General Motors Diesels, were placed in service on the Rock Island's 1,385-mile run between Chicago and Houston via Kansas City, operating on a 55-hour schedule.

A few months later "Rocket Freights" were inaugurated in transcontinental service, effecting a saving of 24 hours in running time between Chicago and the Coast.

"Rocket Freights" more recently were placed in service on the mid-continent route, Minneapolis to Houston. Their high-speed schedules provide *third-morning* delivery at both Houston and the Twin Cities; *second-morning* delivery at Kansas City.

Thus the Rock Island put into operation a wholly new type of fast cargo delivery built around the performance of General Motors freight Diesel locomotives.

ELECTRO-MOTIVE DIVISION

GENERAL MOTORS — LA GRANGE, ILL.

Continuous pressure-welded rails offer unusual advantages in locations such as tunnels, where track maintenance is difficult and costs are high.

Pressure-welded rails eliminate the need for joint bars, bolts, and bolt holes — so there are no openings or surfaces where moisture, brine drippings, or chemical-bearing fumes can lodge and thus act as starting points for corrosion.

Costs of installing continuous rails compare favorably with similar costs for standard-length rails. In recent experience a means has been developed for handling and laying long continuous lengths of rail by small gangs using available light equipment.

Your Oxweld representative will be glad to tell you how oxy-acetylene pressure-welded rails can be used for any location on your road.

THE OXWELD RAILROAD SERVICE COMPANY
Unit of Union Carbide and Carbon Corporation
UCC
Carbide and Carbon Building Chicago and New York

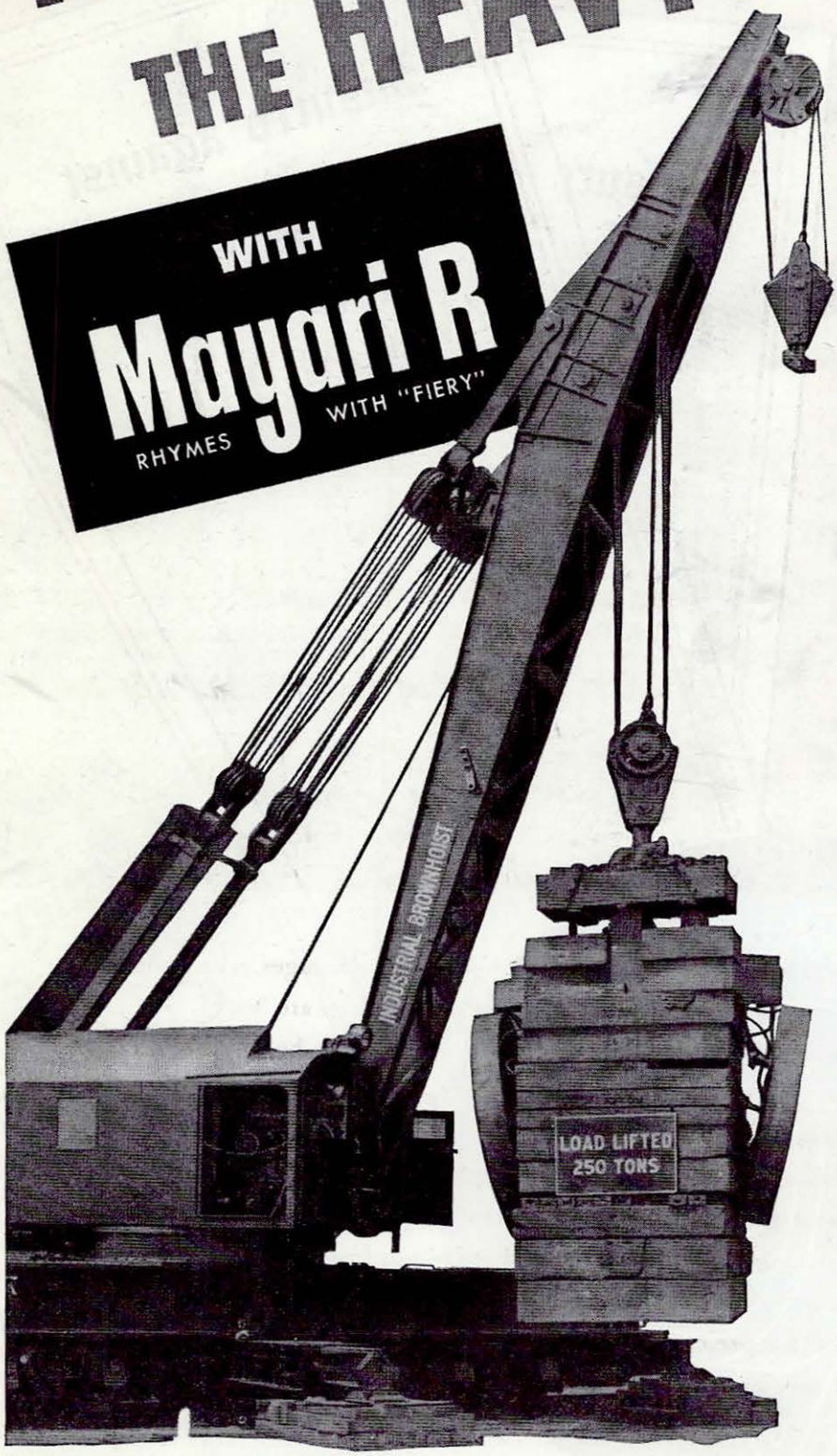
SINCE 1912—THE COMPLETE OXY-ACETYLENE SERVICE FOR AMERICAN RAILROADS

HOISTING THE HEAVYWEIGHTS

WITH

Mayari R

RHYMES WITH "FIERY"



At a 17-ft. 6-in. radius from the center of revolution, this newly designed wrecking crane lifts 250 tons . . . at a distance of 6-ft. 6-in. directly in front of the coupler it can lift 150 tons.

The 46-ft. boom embodies a new design which permits maximum reach with both main and auxiliary blocks. The side girders of this boom and the tension links which lift it are made of Bethlehem's Mayari R, high-strength, low-alloy steel.

In all such equipment, economical design calls for steel with a high strength-weight ratio. Mayari R has this strength—its yield point is 50,000 p.s.i. minimum as compared to 25 to 30,000 p.s.i. for mild-carbon steel. It has an ultimate tensile strength of 70,000 p.s.i. minimum. As a result, deadweight reductions of as much as 40 per cent are often possible.

Mayari R presents no difficulties in forming, fabricating and welding —the usual shop methods are recommended. It is usable in the "as-rolled" condition—heat-treatment is not necessary.

Look into the possibilities of using strong, weight-saving Mayari R for all jobs where lower deadweight, higher strength and reduced operating costs are important considerations.

Industrial Brownhoist Corporation, Bay City, Mich., built four of these 250-ton-capacity wrecking cranes for an Eastern Railroad. Mayari R high-strength steel was used in the booms and tension links.

★ BETHLEHEM STEEL ★

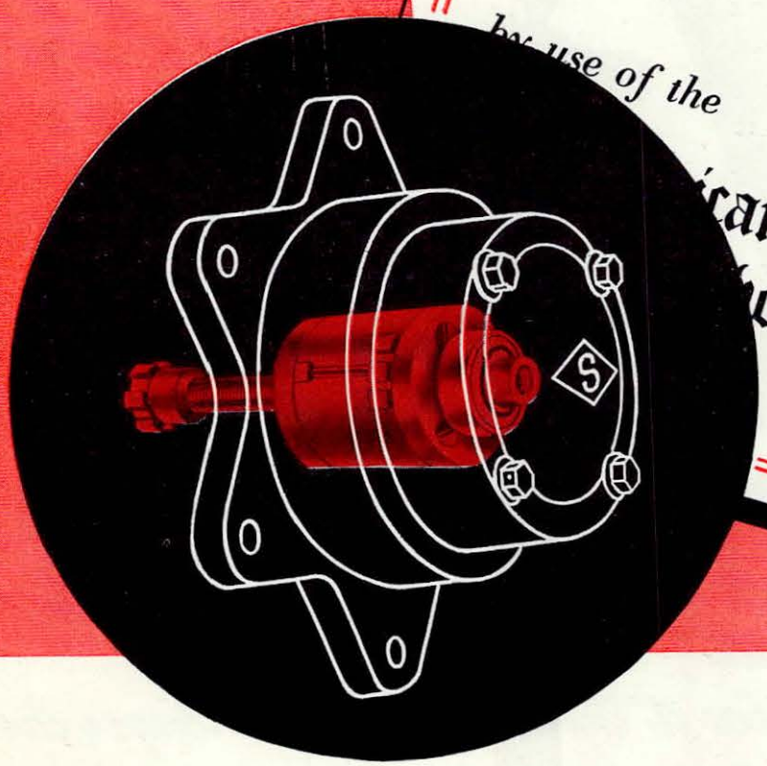
Mayari R *makes it lighter... stronger... longer lasting*

Published weekly by Simmons-Boardman Publishing Corporation, 1309 Noble Street, Philadelphia, Pa. Entered as second class matter, January 4, 1933, at the Post Office at Philadelphia, Pa., under the act of March 3, 1879. Subscription price $6.00 for one year U. S. and Canada. Single copies, 25 cents each. Vol. 121, No. 1.

INSURANCE against

Insured against
LOSS OF
CAR
AVAILABILITY

by use of the
American
Brake Shoe
Controller



4577

Slid Flats...

One button tests the controller on each truck

Insured against SLID FLATS

Railroads today must protect themselves against slid flat wheels thus insuring car availability at all times. They make certain of this protection not by the purchase of insurance but by the installation of a simple, positive-acting electrical device for preventing slid flats during braking — the American Brake Shoe Controller.

You can depend on the American Brake Shoe Controller to detect wheel slippage at once . . . to correct it instantly . . . to restore full brake without fail as soon as slipping is eliminated. Its construction is rugged. Its operation is simple. You can test it while car is in motion or standing.

Insure against slid flats by installing the American Brake Shoe Controller.

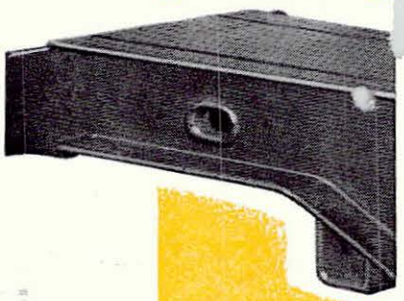
AMERICAN Brake Shoe COMPANY

BRAKE SHOE AND CASTINGS DIVISION

230 Park Avenue • New York 17, N. Y.

Pullman-Standard's

BOLSTER, DRAFT AND END SILL

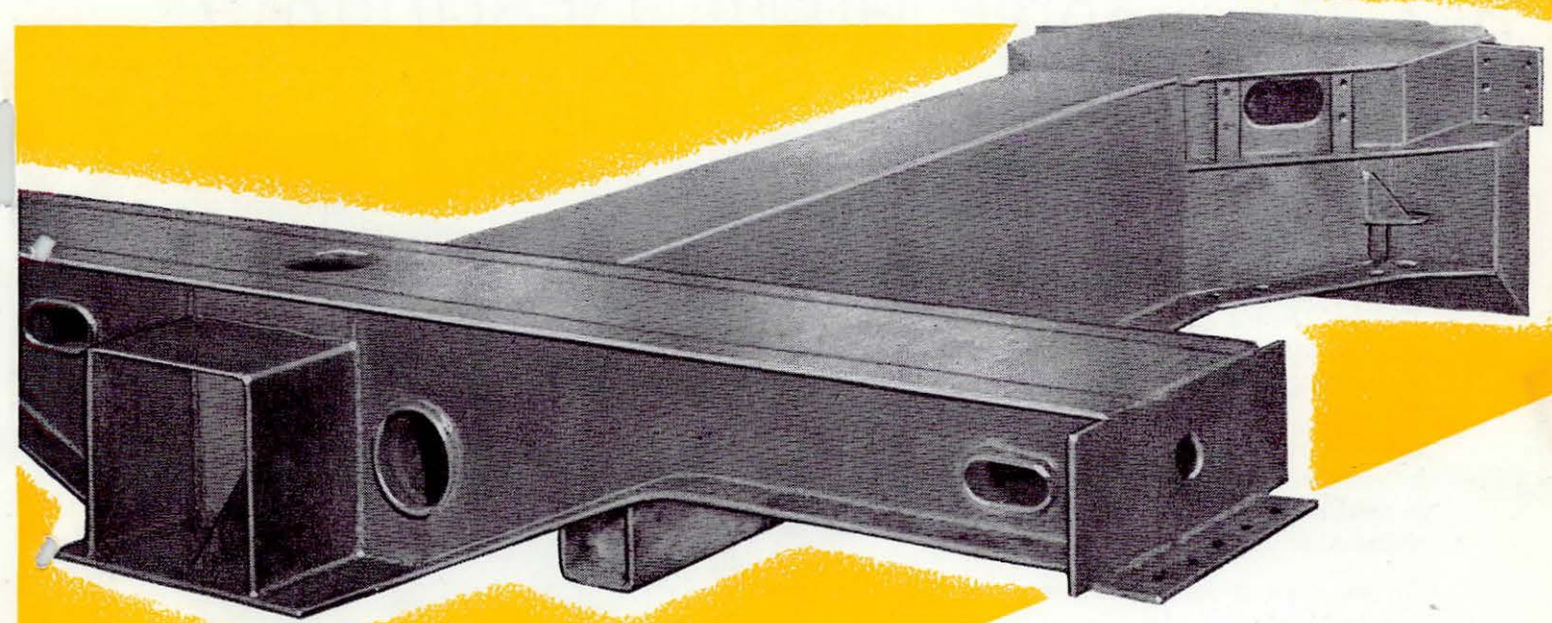


- Saves weight.
- Exceeds A. A. R. strength requirements by 25%.
- In service for 4 to 6 years on 588 cars.
- Has proved its superiority.
- Now specified for hundreds of additional cars on order.

Pullman

CHICAGO · NEW YORK

ASSEMBLY *for Passenger Cars*



RAILROADS SEEKING THE BEST HAVE SPECIFIED THIS CONSTRUCTION REPEATEDLY. THE RECORD RECOMMENDS IT FOR YOUR CONSIDERATION

Standard CAR MANUFACTURING COMPANY

CLEVELAND · WASHINGTON, D. C. · PITTSBURGH · BIRMINGHAM · WORCESTER, MASS.

San Francisco Sales Representative, Mark Noble

They differ about luggage

but they agree about Restfoam!

Best Bet In Riding Comfort

Of course they agree about Restfoam! And so will *your* passengers!

You see, there's greater riding comfort in seats with Restfoam cushioning . . . better sleeping comfort in berths with Restfoam mattresses. That's because this remarkable foam rubber material is "comfortized" by an exclusive Hewitt process, resulting in the resilient comfort that makes train travel more enjoyable.

So plan now to keep *your* passengers satisfied with this "best bet in riding comfort." Remember, Restfoam provides *all five* essential advantages:

Extra Comfortable . . . yields to every contour of *any* person's body, yet offers firm *natural* support.

Keeps Its Shape . . . always returns to its original shape; nothing to pack or mat down.

Cool . . . self-ventilated by millions of tiny interlaced air cells.

Sanitary . . . odorless, washable, vermin-repellent.

Long Lasting . . . far outlasts any ordinary cushioning material.

FREE! Send today for your copy of "Rest Assured With Restfoam." It tells you all about Restfoam—Best Bet in Riding Comfort . . . Write to Hewitt Rubber of Buffalo, 240 Kensington Ave., Buffalo 5, New York.

HEWITT RESTFOAM

is made by **HEWITT RUBBER** *of Buffalo*
Division of Hewitt-Robins Incorporated

QUALITY RUBBER PRODUCTS FOR 86 YEARS

So Simple...

IT'S SOMETIMES OVERLOOKED

Coil springs, in hand scales or freight car trucks, react in *exactly* the same way. For each additional unit of weight, the springs are compressed an additional unit of distance. For each unit of weight removed, the springs recoil an equivalent amount.

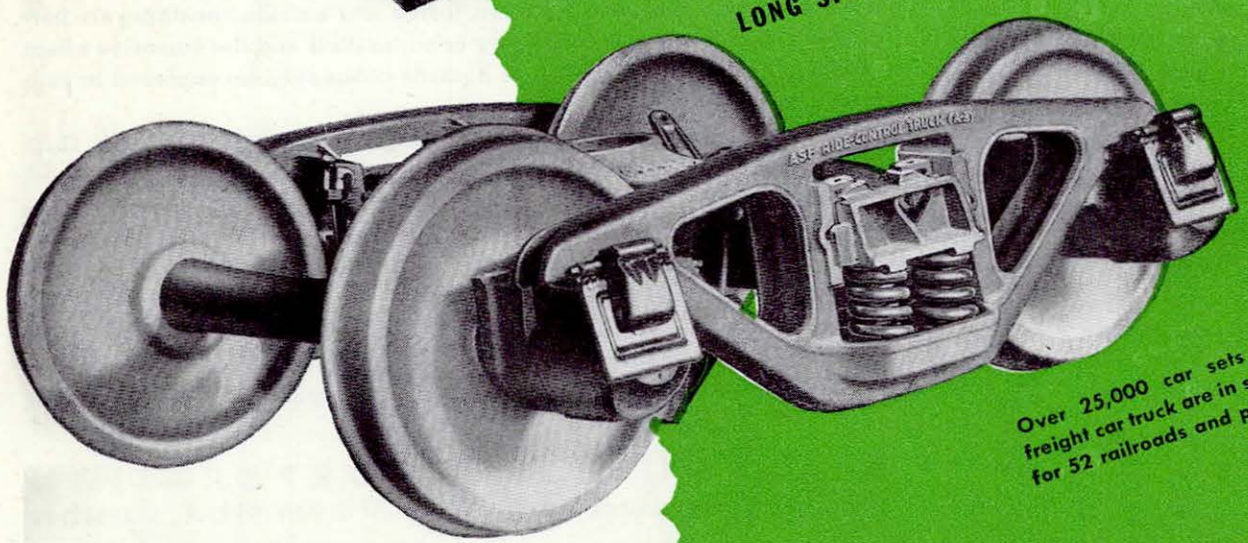
That's why coil springs in freight car trucks are best controlled by constant resistance that is uniform throughout full spring travel, *both up and down*. Only in this way can maximum freedom of movement be preserved for natural cushioning effect.

This is the principle of *Ride-Control* . . . soft, long-travel springs *plus* constant friction control that cushions all bolster motion—up, down, across-track. Millions of miles of better freight car service have proved and reproved that A.S.F. Ride-Control Trucks cut maintenance on rolling stock and roadbed; give lading an easy ride.

A·S·F *Ride-Control* TRUCK (A-3)

NO SPRING PLATES—NO SPRING PLANKS

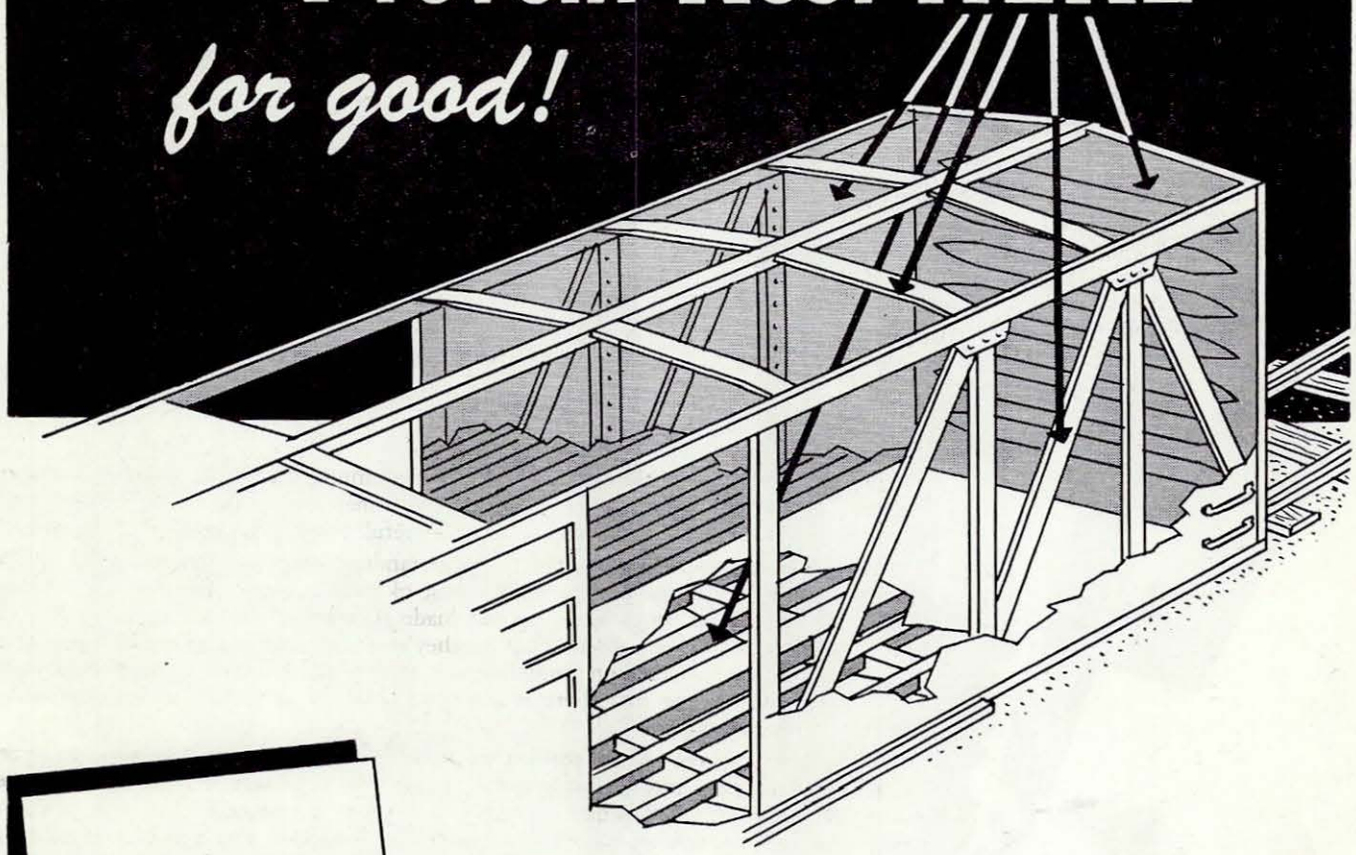
LONG SPRING TRAVEL • CONSTANT FRICTION CONTROL



Over 25,000 car sets of this modern freight car truck are in service or on order for 52 railroads and private car owners.

AMERICAN STEEL FOUNDRIES

Prevent Rust HERE *for good!*



Check These Features:

- Apply directly over any rusted surface
- Simply wire brush to remove loose scale, blisters and dirt
- Rust-Oleum penetrates the remaining rust and spreads an unbroken protective coating over the entire surface
- Excellent coverage. Gallons of economy
- It's easy to apply by brush, dip or spray...Saves time, labor, and money

RUST-OLEUM

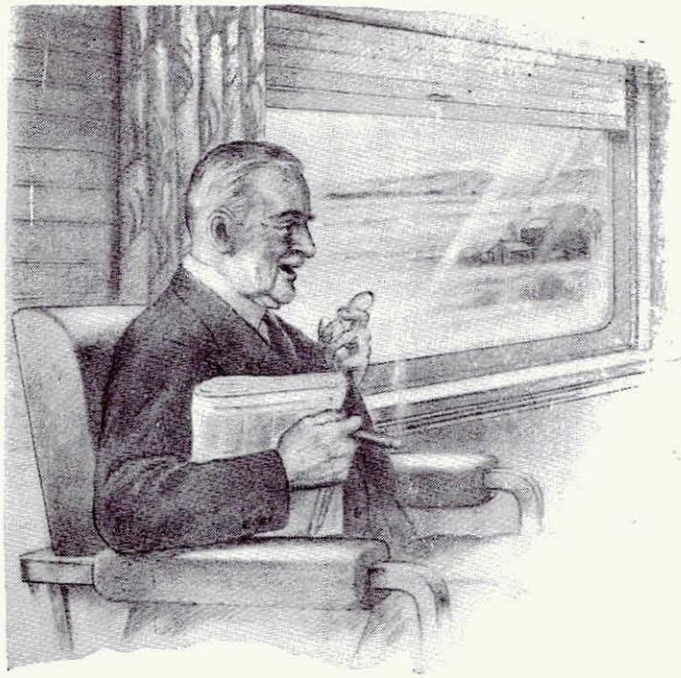
Provides Lasting Protection

When rust attacks the hidden metal surfaces of rolling stock, look out! You're in for another costly, time consuming rebuilding job. Yet those inner surfaces—the areas between inside and outside sheathing are particularly subject to rust caused by condensation and the corrosive effect of acids, brine, sulfur, and other hazards commonly encountered in railroad operations.

On your next car rebuilding job, *stop rust once and for all.* Coat those inner metal surfaces with RUST-OLEUM, the scientific, pure rust preventive. This remarkable product effectively prevents the formation of rust—penetrates through to virgin metal and spreads protective coating over the entire surface. And this protection LASTS FOR YEARS, as proved conclusively in practical tests.

Rust-Oleum does not blister, crack or peel. It is air-tight, waterproof, pliable and elastic. For years it has cut car maintenance costs for American Railroads. *Write today for Catalog No. 145 for recommended applications.*

RUST-OLEUM CORPORATION
2415 OAKTON STREET • EVANSTON, ILLINOIS



Railroads Have Plenty of Good Friends

says

R. R. Rider

(Number eight of a series)

What with the war and all, I haven't traveled much during the past few years, but I've not had too bad a time on the trains. Railroad men saw to that; they've always tried to ease things as much as they could, and I'm grateful. I tell them so, too, whenever I can.

People have generally been pretty understanding about the crowding, delays, and discomforts they've had to put up with. Most of them realized that the railroads were doing their best with a tough situation and made allowances. But I *have* met a few who didn't know what it was all about. Luckily, they're so rare that it's no use thinking about them at all, and the only reason I mention this unpleasant incident is that there's a good side to it. It showed me that there is a general spirit of good-will towards railroads—especially railroad people.

I'd been to Chicago and on the way back had to take one of the last available uppers. I didn't mind that, but another passenger didn't feel the same way. Bill Russell and I were in the club car when the Pullman conductor came in, this woman behind him. She acted plenty mad and was talking to beat the band. The conductor was trying to explain that there were no accommodations better than the one she had. But she wouldn't listen, and finally she made the usual threats.

Everyone in the car was taking this in. It made me sore and I could see it did the others too. At last Bill muttered something, got up, and went over.

"Conductor," he said, "I've heard about enough. If this lady makes a complaint I'll be glad to take your side. She's completely unreasonable and you've shown more patience than anyone could expect. Here's my card."

Well, I offered my card too—so did five or six others. And the woman—she got out of there fast.

As I said, I saw few such happenings, but I'm glad I was in on this one, for I liked the spirit shown by those passengers who were willing to go out of their way to see that conductor get justice. It proves that the railroads have friends they can depend upon.

Edgewater

Serving America's Railroads

RING SPRING DRAFT GEARS

ROLLED STEEL WHEELS

LOCOMOTIVE TIRES

EDGEWATER STEEL COMPANY • PITTSBURGH, PA.

Atlanta — Baltimore — Boston — Chicago — Cleveland — Kansas City — Louisville — New York
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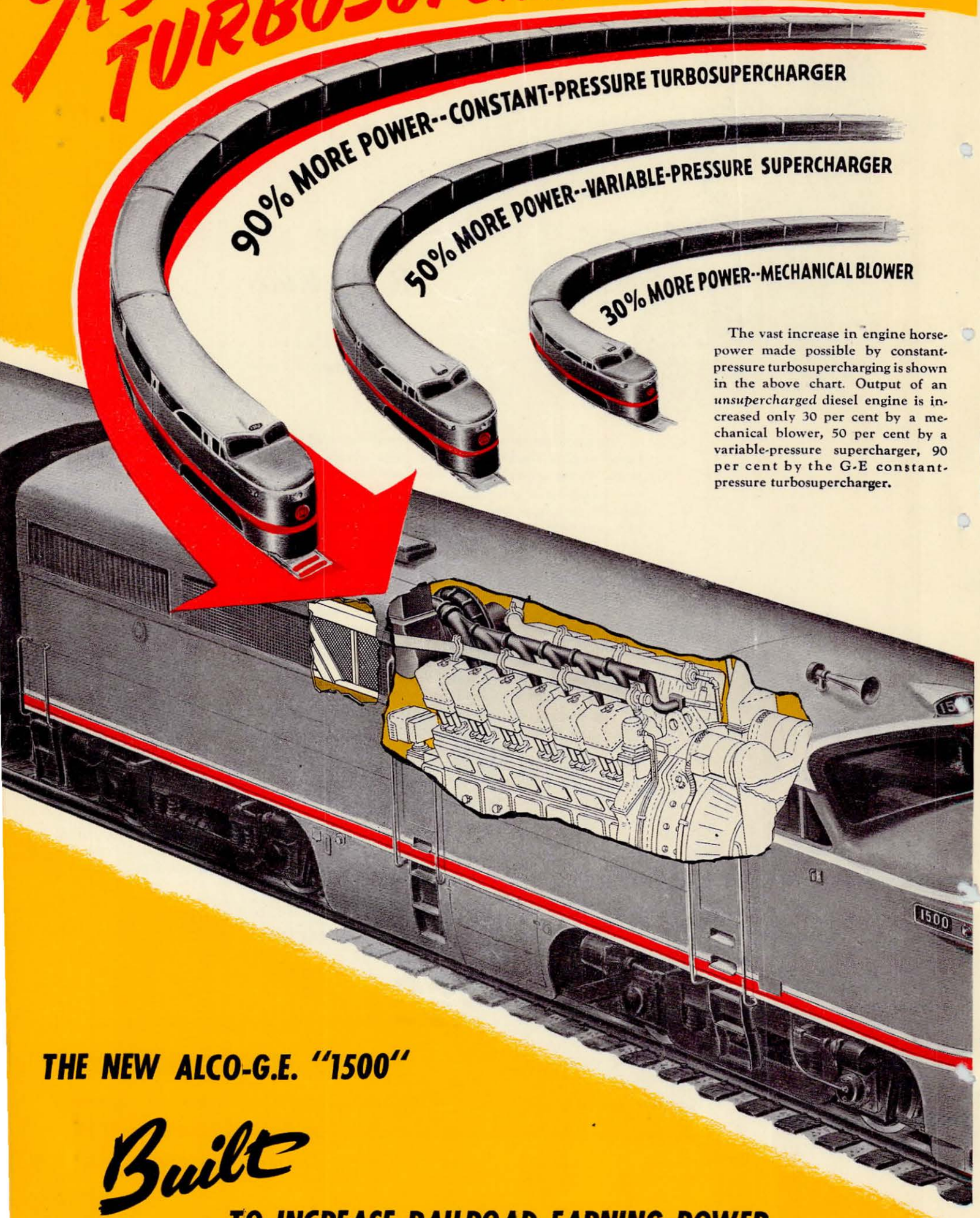
It's TURBOSUPERCHARGED!



The vast increase in engine horsepower made possible by constant-pressure turbosupercharging is shown in the above chart. Output of an *unsupercharged* diesel engine is increased only 30 per cent by a mechanical blower, 50 per cent by a variable-pressure supercharger, 90 per cent by the G-E constant-pressure turbosupercharger.

THE NEW ALCO-G.E. "1500"

Built

TO INCREASE RAILROAD EARNING POWER

MORE POWER TO RAISE THE CEILING ON PAY LOADS

This new Alco-G.E. diesel-electric road locomotive is equipped with an entirely new design of turbosupercharger which boosts engine horsepower approximately 90 per cent. This wealth of power means extra locomotive performance at lower cost—greater tractive effort, more tons of pay load, and faster schedules. All this and fewer power units, too, because each does more work and has higher availability.

This performance results largely from use of a new, constant-pressure system of turbosupercharging developed by General Electric for the Army Air Forces. Delivering air to the combustion chamber under pressure of 16 to 18 pounds per square inch, this system produces extremely high horsepower per cubic inch cylinder displacement, at unusually low fuel consumption rate. Specific output of the turbosupercharged engine is approximately two to four times that of other heavy-duty railroad diesels.

Compared with previously used supercharging systems, the constant-pressure turbosupercharger is simpler, lighter, and more efficient. It consists of but a single unit and operates from only one exhaust manifold connecting all cylinders. The unit itself weighs 1400 pounds—1100 pounds less than the two superchargers used in a conventional variable-pressure system.

And with the variable-pressure supercharger, output of the new diesel engine was raised from 800 horsepower to only 1200 horsepower—an increase of 50 per cent. With the constant-pressure turbosupercharger, output was boosted to 1500 horsepower, *plus*—an increase of 90 per cent.

This mighty new turbosupercharger is only one of the many new features of the "1500." The new 12-cylinder diesel engine, the specially developed railroad-type generator and traction motors, the power plant load regulating system, the engine cooling system—all combine to make a locomotive which will haul more tons more miles in less time, at less cost. This locomotive is *really built to increase railroad earning power.*

Alco GE

AMERICAN LOCOMOTIVE AND GENERAL ELECTRIC

113-169-9580

Exide

IRONCLAD BATTERIES

BUILT FOR PEAK PERFORMANCE AND LONG LIFE IN HEAVY-DUTY SERVICE...

The Exide-Ironclad is a different type of battery . . . in design, construction, service qualities. It was developed to meet the need for a battery to deliver high, sustained power in heavy-duty service over a long period of time.

THE POSITIVE PLATE is unique in battery design. It consists of a series of slotted, vertical, hollow tubes which contain the active material (See illustration at left). The slots in the tubes are so fine that, while they permit easy access to the electrolyte, they prevent the lead oxide from readily washing out, thus adding considerably to the life of the plate.

THE NEGATIVE PLATE has been designed and is built to equal the increased life of the positive plate. Like the positive plate, it has two feet at the bottom to raise it above the two supporting ribs.

SEPARATORS are made of Exide Mipor, a special rubber composition, and will match the long life of Exide-Ironclad plates. The cutaway illustration shows how separators rest on ribs well below bottom of plates, thus making probability of internal short circuits very remote.

THE EXIDE-IRONCLAD ASSEMBLY is sealed in jars of Giant Compound. Jars are practically unbreakable in normal service.

THE RESULT is an efficient, ruggedly built battery that assures dependable performance, long life and maximum economy . . . a battery that fully measures up to each service requirement . . .

★ ***HIGH POWER ABILITY*** . . . needed in frequent "stop and go" service.

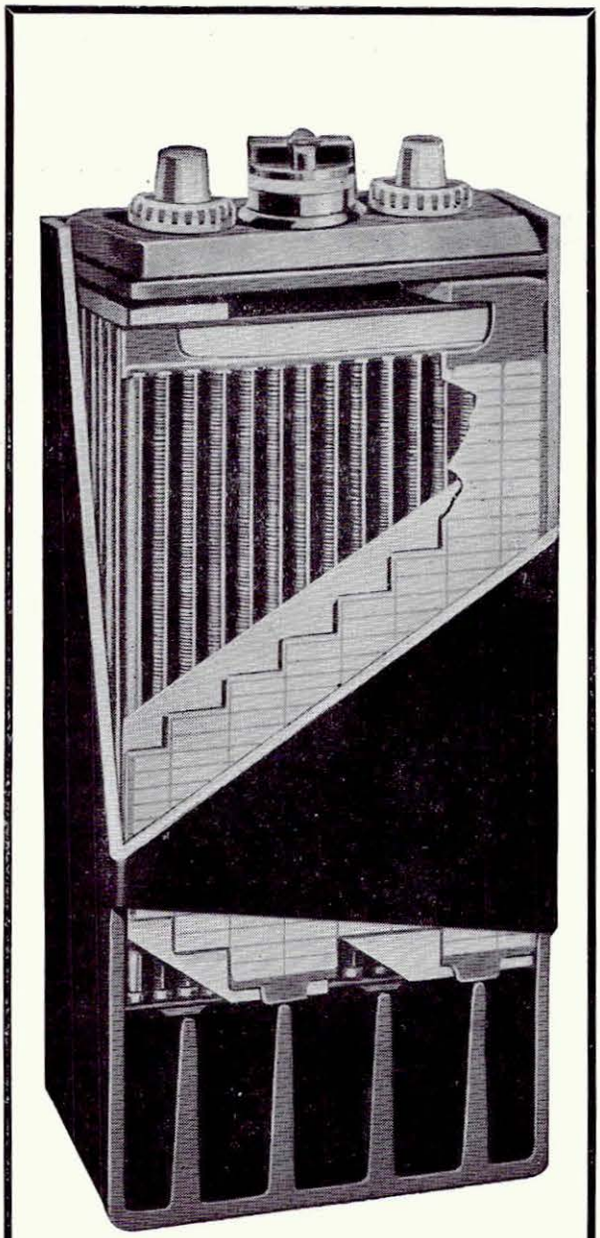
★ ***HIGH MAINTAINED VOLTAGE*** throughout discharge.

★ ***HIGH ELECTRICAL EFFICIENCY*** that keeps operating costs low.

★ ***RUGGED CONSTRUCTION*** . . . for long life.

Exide-Ironclads are supplied in sizes to suit numerous railway applications, including car lighting, air-conditioning, electric industrial trucks and Diesel locomotive cranking.

THE ELECTRIC STORAGE BATTERY COMPANY, Philadelphia 32
Exide Batteries of Canada, Limited, Toronto



CINCINNATI GIVES HER BIG FAMILY

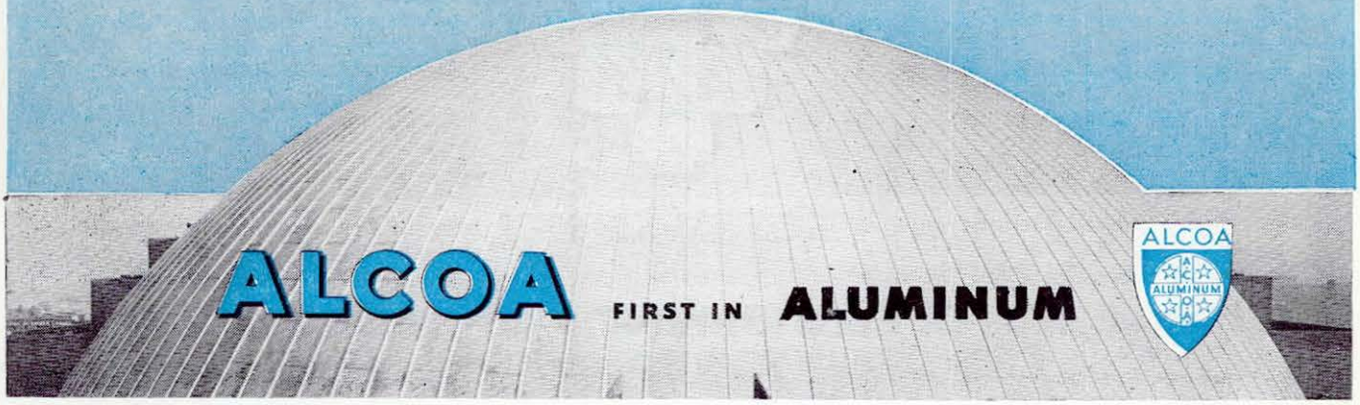
A New Aluminum Roof

All credit to Cincinnati for her "big family" of railroads operating 140 trains a day from the Queen City's magnificent Union Terminal. When the building was designed, over 13 years ago, generous use of Alcoa Aluminum was made in doors, windows, sills, grilles, handrails and numerous other applications. When the "family" needed a new roof recently, Terminal engineers made a study of available roofing materials . . . a study that led to Alcoa Aluminum.

As prefabricated by Overly Manufacturing Company, Greensburg, Pennsylvania, the roof, known as the Goodwin Batten type, required only 3½ months to install, though much of the work was done under severe winter conditions. The curved shape of the roof imposed a major structural problem—each section required preforming and precutting to fit.

The finished 32,000 sq. ft. roof weighs only 1/20 as much as the previous nonmetallic one, and embodies all the other advantages of Alcoa Aluminum roofing: nonrusting, requiring no painting, permanently attractive, it will save the Terminal many dollars per year . . . the same kind of maintenance savings Alcoa Aluminum offers everywhere that railroad equipment rolls or railroad buildings stand.

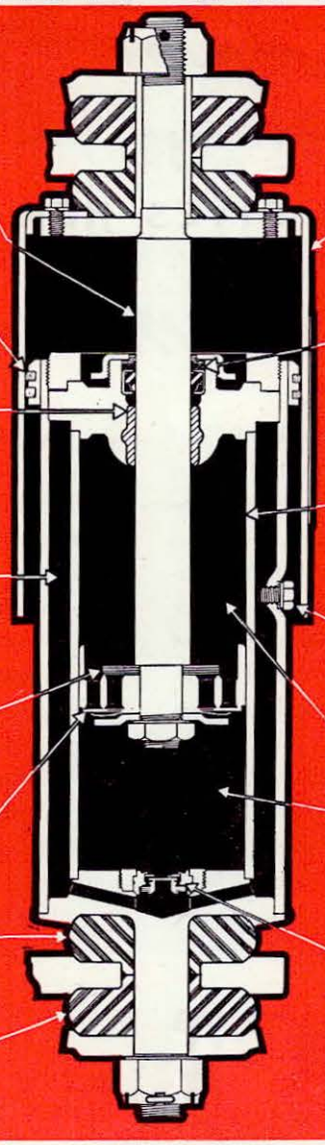
ALUMINUM COMPANY OF AMERICA, 2178 Gulf Building, Pittsburgh 19, Pennsylvania. Sales offices in principal cities.



CONSIDER THE ADVANTAGES OF

MONROE

HYDRAULIC SHOCK ABSORBERS FOR RAILWAY APPLICATION



Chromium plated plunger.

Dirt wiping ring.

Longer wearing plunger guide.

Large capacity fluid reservoir.

Rebound control valve

Refill valve.

Large rubber mounting cushions produce low unit loads—hence long life.

Longer, removable dirt shield assembly.

Improved, oil seal assembly.

Micro-finished pressure cylinder.

Filling screw.

Large volume pressure chambers provide low unit pressures, softer riding qualities.

Improved compression control valve and refill valve.

Monroes have proved their advantages for railway use over millions of car miles. Quickly and easily installed on your present equipment. Monroe engineers promptly available for consultation and collaboration. Write or wire—

MONROE

MONROE AUTO EQUIPMENT CO., MONROE, MICH.

CHICAGO OFFICE
3001 Willoughby Tower Bldg.

RAILWAY SUPPLY DIVISION

WASHINGTON, D. C., OFFICE
1028 Connecticut Ave. N. W.

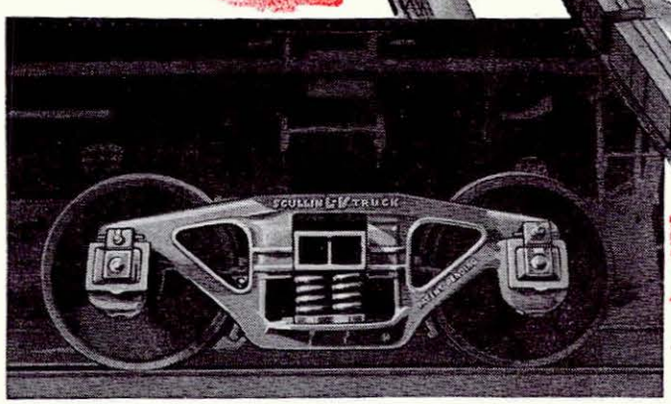
"Pullman" ease and speed

FOR FREIGHT...

The New SCULLIN L-V TRUCK

LATERAL-VERTICAL CUSHIONED MOTION

completely controls both Lateral and Vertical motion



The nearest approach to sleeping car smoothness—designed to make higher speeds really *safe* for lading, cars and track. • A unique arrangement of built-in lateral springs between side frame and bolster, which also actuates vertical snubbing elements, provides ultimate riding qualities. • For complete details write:

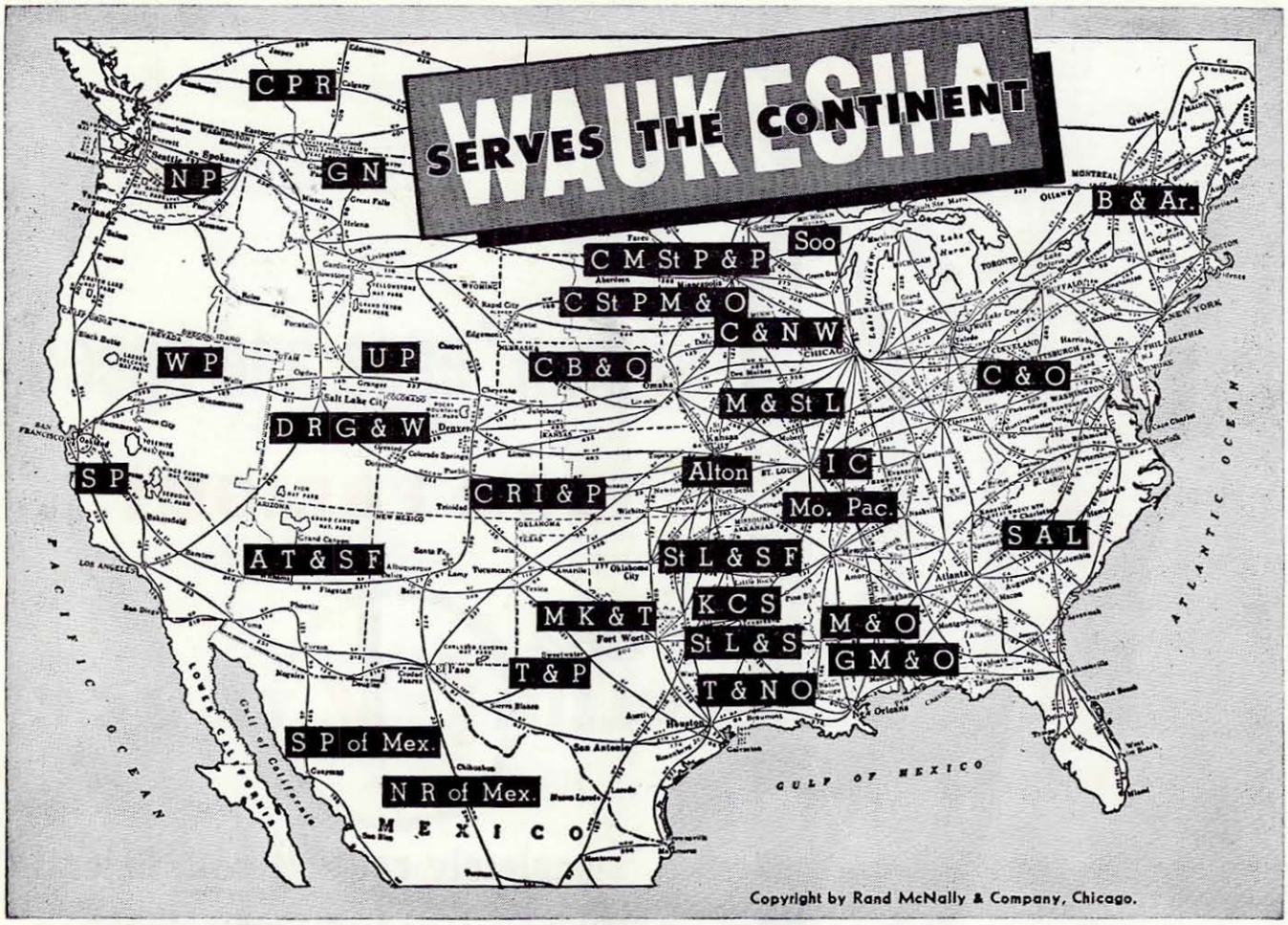
ARMY ★ NAVY

SCULLIN STEEL CO

SAINT LOUIS 10, MISSOURI

STEEL CASTING MANUFACTURERS SINCE 1899

NEW YORK • CHICAGO • PHILADELPHIA • CLEVELAND • ST. PAUL • BALTIMORE • RICHMOND, VA. • MEXICO CITY, D.F.



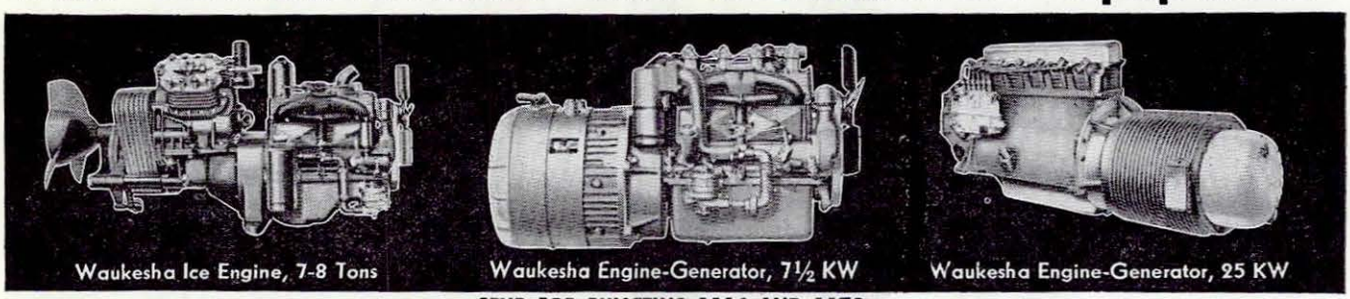
Serving more than 160,000 miles of railroad

THESE 31 ROADS ARE USING

WAUKESHA

Engine Driven

AIR CONDITIONING and GENERATOR Equipment



Waukesha Ice Engine, 7-8 Tons

Waukesha Engine-Generator, 7½ KW

Waukesha Engine-Generator, 25 KW

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REFRIGERATION DIVISION **WAUKESHA MOTOR COMPANY** **WAUKESHA, WISCONSIN**

Largest Builders of Mobile Engine-Driven Refrigeration and Generator Equipment

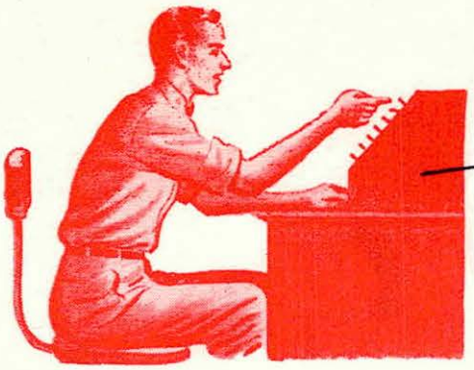
Magor

Designers and Manufacturers of Freight Cars of All Types Including Air Dump Cars

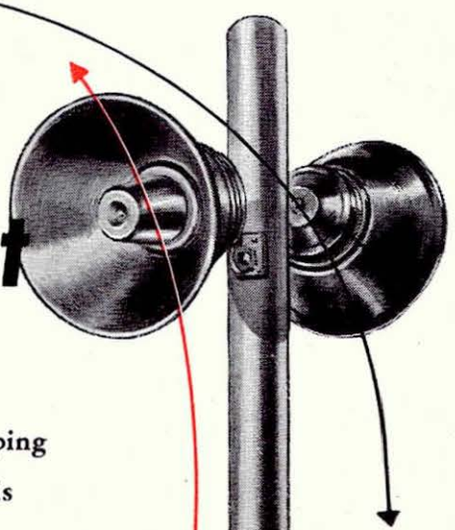
MAGOR CAR CORPORATION

50 Church Street

New York 7, N. Y.

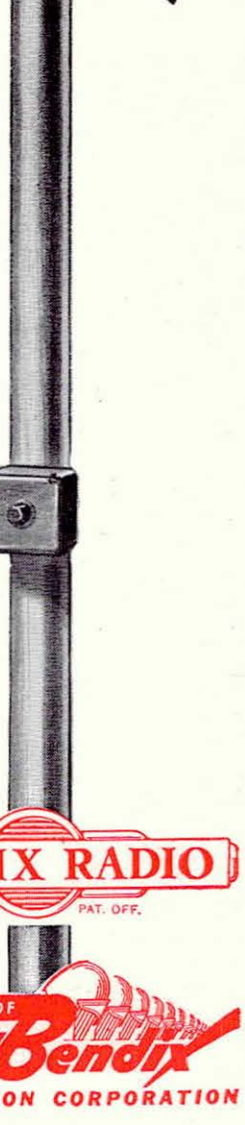


A new talking point



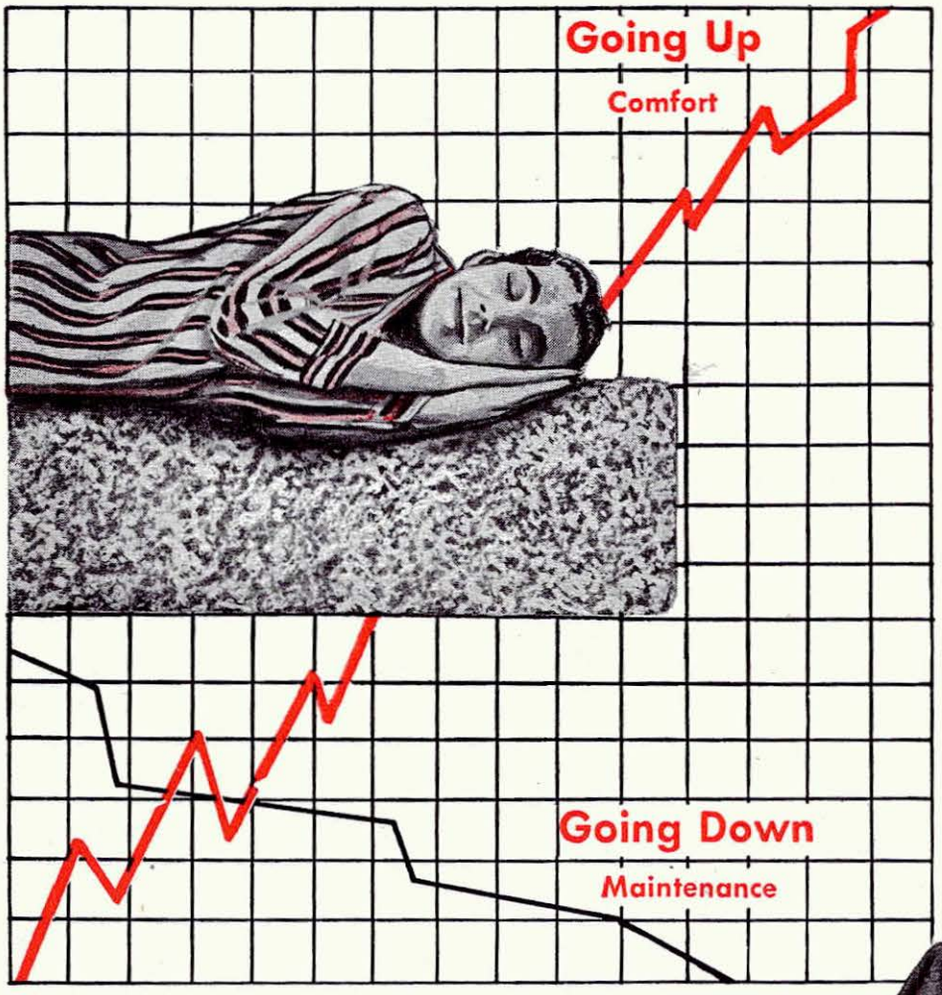
Fast, simple and reliable in operation—the Bendix Yard Loud Speaker System brings *two-way* voice communications to railroad yards . . . expedites car movement by keeping yardmaster in speaking contact with the man-on-the-spot. . . . This system, engineered and built by Bendix, merits your investigation. Ask our engineers for complete information.

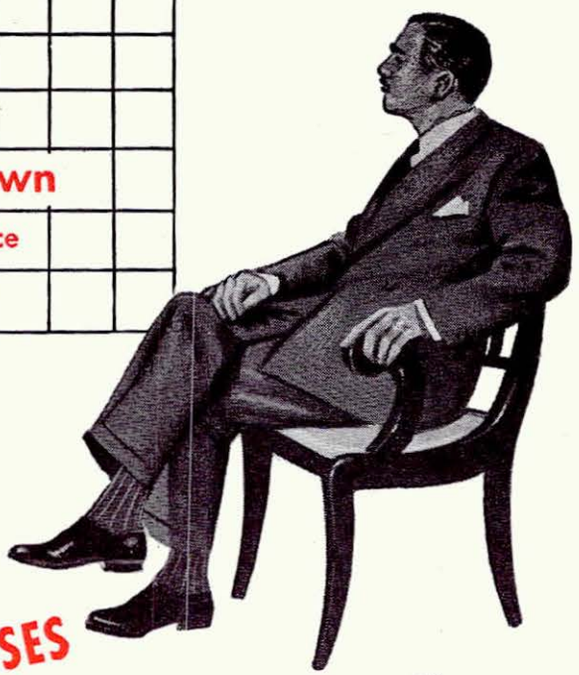
BENDIX RADIO DIVISION • BALTIMORE 4, MARYLAND



BENDIX RADIO
REG. U. S. PAT. OFF.

PRODUCT OF Bendix
AVIATION CORPORATION





Firestone

FOAMEX* MATTRESSES

For the trains of today and tomorrow

Sleeping comfort zooms with *Foamex*—a magic, air-bubbly revolutionary mattress material created by Firestone. *Foamex* swallows road shock, gobbles up vibration and gives passengers the sweetest, deepest sleep known to man.

Foamex has millions of tiny, breathing air-and-latex cushions per cubic inch—each one super-*soft* and buoyantly *resilient*.

Mattress upkeep slashed! *Foamex* eliminates mattress "make-over" and repairs. Only *one* unit, with no loose stuffing to lose shape, no metal to lump or sag. Years more "brand-new" service. Electronic-processing now makes *Foamex* even more durable.

Railroad executives learned about *Foamex* advantages through year after *extra* year of service on leading passenger lines.

FREE—Write Firestone, Akron, for full color booklet, "Foamex Cushioning and Mattress Material."

BEST TODAY... STILL BETTER TOMORROW

*TRADE MARK

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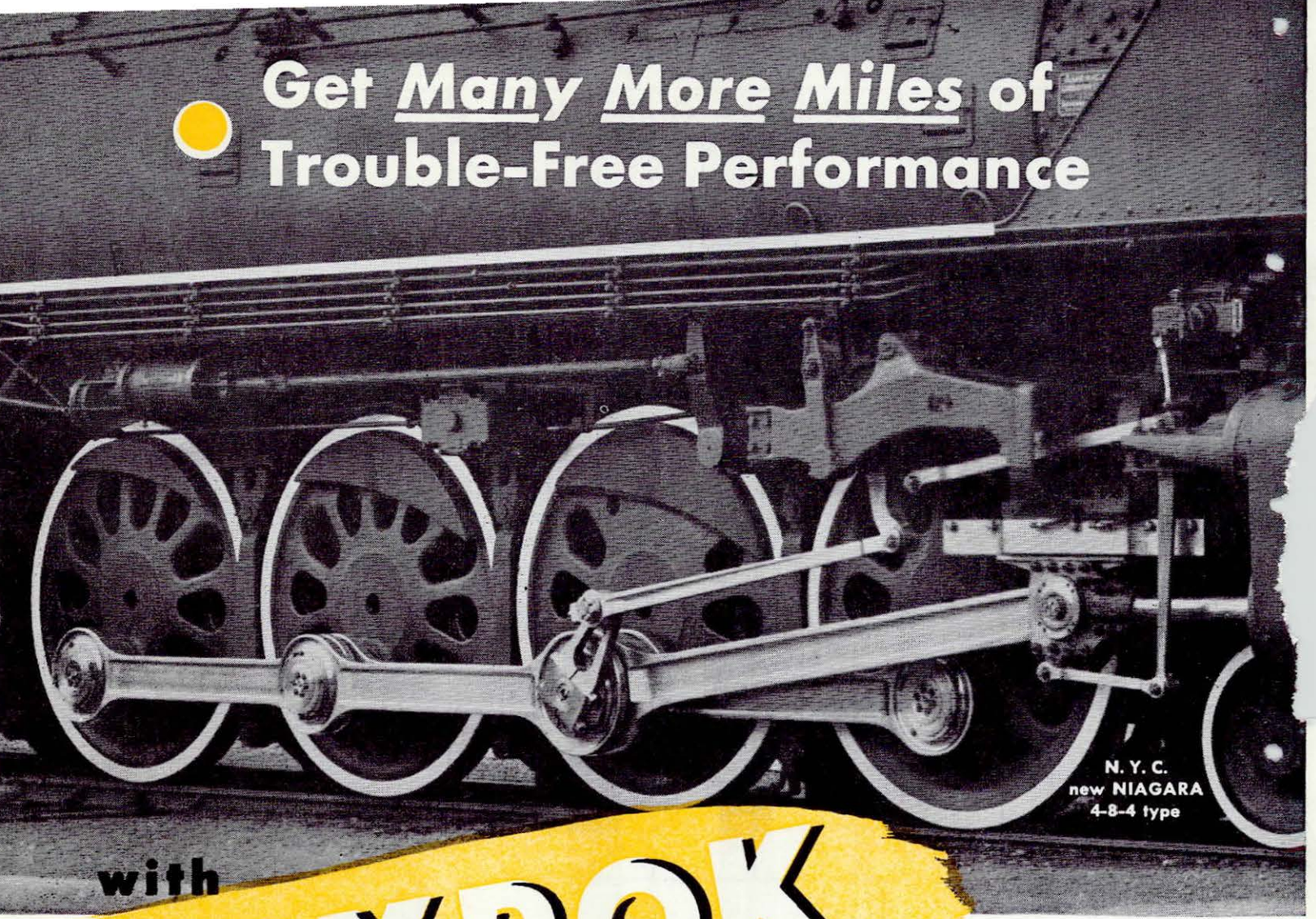

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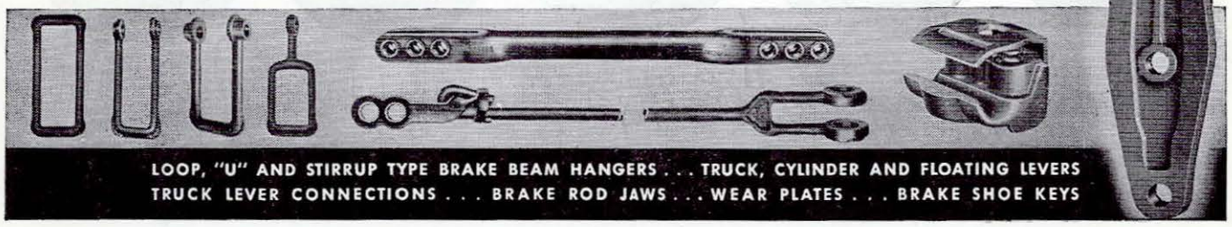

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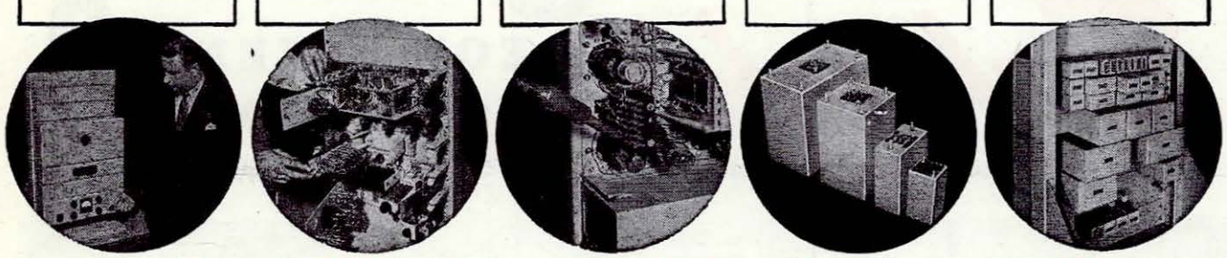

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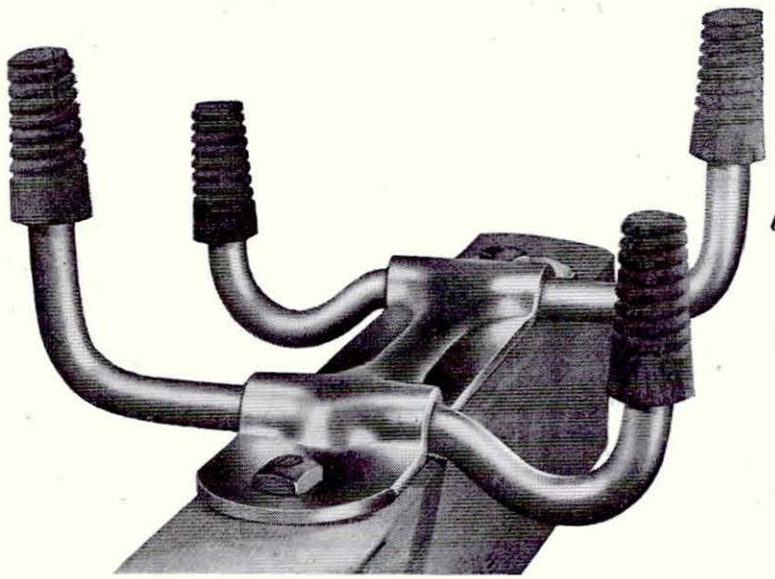

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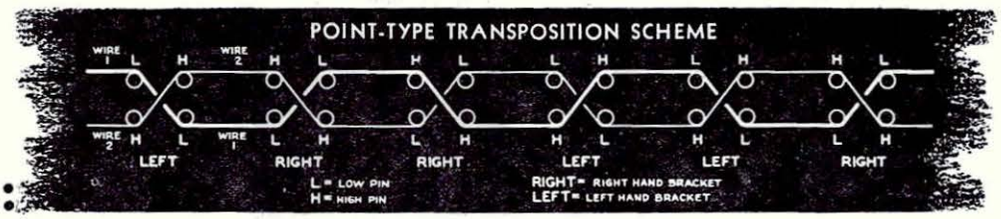

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Forty-ninth annual convention features technical program including addresses and reports having important bearing on the purchase and utilization of railway materials.

"Agreed Charges" Prove Popular in Britain **9**

G. Lloyd Wilson discusses the system inaugurated in 1934, and the procedures by which such agreements are arrived at and the interests of other parties are protected.

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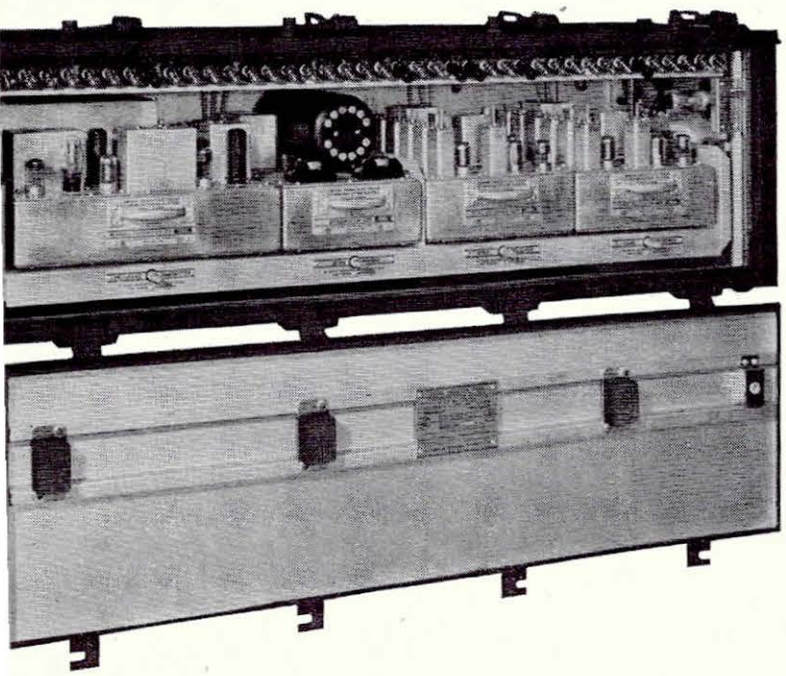

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ION **I. T. C.** THE VOICE OF EXPERIENCE IN TRAIN COMMUNICATION

The Week at a Glance

RATE ADVANCE STANDS: So far as the commission is concerned, arguments on behalf of interests in Official territory protesting the additional 5 per cent freight rate increase it authorized for that section in the June 20 Ex Parte 162 order have failed to get to first base. New York's lawyer contended that the meaning of the order wasn't clear, but the commission pointed out that the railroads seemed to have no difficulty in understanding it. Meanwhile plans are going forward for hearings and argument on the fundamental issue in the proceedings, that is, whether the railroads can establish on a permanent basis a freight rate increase amounting, with certain substantial exceptions, to 25 per cent on the pre-July 1 basis. Details appear in the news columns in this issue.

●

MORE FREIGHT?: Shippers Board estimates of carloadings in this year's third quarter, reported in this issue, add up to an increase of 2.7 per cent over last year's third quarter. New England and the Great Lakes territory expect the largest increases; the Southwest expects the largest relative decline. In the face of such predictions, continued difficulties are reported in getting deliveries of such new equipment as has been ordered. Following other actions taken in Washington to bring about the most intensive utilization of the cars that are available is the O.D.T.'s current "request" that all railroads apply their utmost efforts to reducing the number of bad order cars.

●

A.S.T.M. AT BUFFALO: More than 150 technical papers and committee reports were presented at the annual convention at Buffalo last week of the American Society for Testing Materials, the proceedings of which are the subject of an article in this issue. Among other features of the meeting briefly reviewed is the symposium on atmospheric action on corrosion-resistant steels. Papers and discussions in that category dealt with such topics as marine exposure tests of corrosion-resistant sheets, and atmospheric corrosion tests of steels of various compositions and shapes, including wire. War-time emergency departures from various recommended specifications were rescinded, and many proposals were made for modifications of standard specifications.

●

TWO WAYS OUT: A compilation of potential net railway operating income and net income for 1946, arrived at by extending over the year the actual relationship to last year's results shown in the first quarter, leads to figures indicating as clearly as a hurricane warning that there are tough times ahead. Unless the trend is changed, 1946 will turn out to be a worse year, so far as earnings go, than 1938. But the trend can be changed, an editorial points out. The Interstate Commerce Commission has just taken one very inadequate step in that direction in restoring (with some modifications) the Ex Parte 148 freight rate increases pending further proceedings in Ex Parte 162—though the favorable effect on income of this rate increase will be offset at least partially by the addition in May of a further wage rise of 2½ cents per hour. Other measures to avert the indicated distress can be taken by the commission and state administrative bodies, with shipper cooperation; these, if not too long delayed, will improve revenues. And other steps can be taken by labor and suppliers of materials, and by railway officers who purchase the materials and hire the men; these measures will reduce expenditures. Courage and intelligence and energy can do much to avert the results suggested by the first quarter comparisons.

●

INCOMPATIBILITY: Evidence is not lacking that there is an effective and politically powerful minority determined to establish in this country what will be, in effect, and despite possible disguises, a totalitarian government—that is, one based on compulsion imposed on the individual. Obviously this group has no desire to see an economic system based on free, voluntary, competitive private enterprise functioning smoothly and producing for the people more purchasing power and more wealth than any other system. Harnessed in the same political team with this minority is another group—one probably not particularly inimical to private enterprise as such, but almost equally dangerous to its survival because the members of that group suffer from a fundamental lack of understanding of the economic laws and principles under which private enterprise operates. Between them these groups are now, and for some years have been, endeavoring with indefatigable zeal to employ compulsory socialistic devices to curb or cure real or invented functional disorders in the voluntary competitive system. As this issue's leading editorial observes, such efforts, whether well-intentioned or not, have failed, and are bound to fail, for the simple reason that an economic system cannot be half fish and half fowl, cannot be part compulsory socialism and part voluntary capitalism.

●

NOTED IN BRIEF: The Northern Pacific has just completed a new car shop at Brainerd, Minn. . . . Ceremonies at Denver recently marked the tenth anniversary of the North Western-Union Pacific "City of Denver" operation. . . . The Interstate Commerce Commission has given its approval to the Seaboard reorganization plan, with some reservations about fees for receivers and counsel. . . . The federal court has returned the Rock Island plan to the commission for further consideration. . . . The Kansas City Southern has set up a subsidiary to engage in contract operations by air. . . . George A. Blackmore was honored on completion of fifty years' service with Union Switch & Signal, where he remains chief executive officer. . . . Pullman proposes to tighten refund provisions for unused space. . . . Certificate No. 44, giving war-time anti-trust immunity to joint action on rates, has been extended another three months.

SHARING ECONOMIES: What the British railways have been doing to put the system of agreed charges on freight or express into actual practice is related in an article this week by G. Lloyd Wilson of the University of Pennsylvania. It is pointed out that the terms of each agreement are subject to negotiation in the light of the characteristics peculiar to the individual "trader's" business, many of which are brought to light by a standard "questionnaire." Generally speaking, the amount of the charge and the terms and conditions applicable to specific agreements are established, on the basis of data so accumulated, by the Railway Clearing House, in which all the British railways are represented. If accepted by the "trader," they are then made public and opportunity is afforded for protest by interested parties. The Rates Tribunal, after formal hearing, then approves or rejects the proposal, or in its discretion modifies its terms. In 1944 there were 2,202 such agreements in effect, their result being to give participating customers a share in the economies realized by the carriers in the movement of such traffic.

●

WELDING PRACTICES: The techniques and facilities used at American Locomotive's Schenectady plant for the fusion welding of boilers are illustrated on page 4. Automatic machines have been specially developed to facilitate this work, and X-ray photography is consistently used to examine welds for defects.

●

RAIL-BUS AFFILIATION: The precedent established by the Interstate Commerce Commission in its ruling in the so-called Rock Island case that a railroad's common carrier motor vehicle operations, direct or indirect, must be definitely "auxiliary to or supplemental of" train service is a precedent that applies only to truck operation, the commission's Division 4 says. As related in the news columns this week, an application by a railroad's bus subsidiary for authority to acquire a connecting bus line was opposed on the ground that the conditions set forth in the ruling case were not met. They need not be met, the division says, if the acquisition is otherwise found to be in the public interest, as competitive conditions in the bus industry are quite different from those prevailing in the trucking business, and exceptions to the customary territorial restrictions are permissible.

●

TELETYPE NETWORK: A short article herein outlines the system by which the Pennsylvania handles an average of 200,000 teletype messages and reports daily, involving 182 separate offices and 33,700 miles of circuits. By means of 13 strategically located teletype switching centers connections are established directly between offices as required, so eliminating delays experienced when manual relay and repeated transmissions are necessary. The switching centers are, in effect, manually operated switchboards, where connections are made as calls for them are transmitted by teletype.

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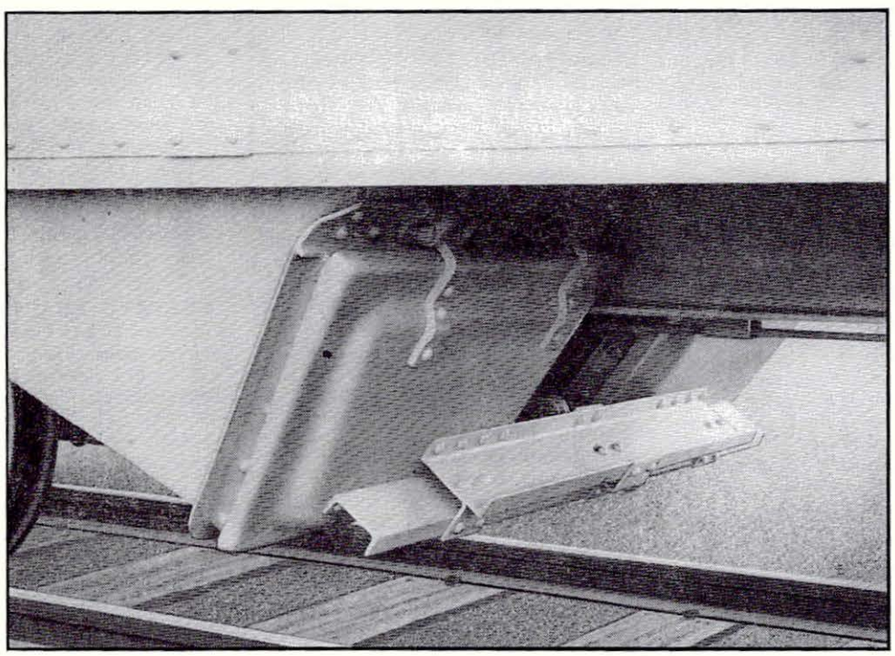

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RAILWAY AGE

The Infallible Wrongness of New Dealers

How long and often must economic developments prove the forecasts and nostrums of New Dealers and other promoters of national socialism wrong before the American people finally will lose all confidence in them?

"Mass unemployment" was the specter with which the New Dealers were still trying until recently to haunt us into submission to their policies. They continued long after V-J Day to predict 8,000,000 unemployed by spring. The "workers"—i. e., members of labor unions—would not have enough purchasing power to remedy this unemployment, or prevent it from increasing, unless the Murray "full employment" bill and numerous other socialistic measures were adopted. Most important of all, to provide enough mass purchasing power, a big program of government expenditure on public works must be adopted.

And what actually has occurred? The Murray bill was passed in a very watered-down form; but everybody is so busy that the President has been unable to get anybody to administer it, and almost everybody has forgotten it. Ever since V-J Day it has become more evident that the huge purchasing power accumulated during the war, not merely by members of labor unions, but by the nation's entire people and its business, has been creating a demand for all kinds of civilian goods vastly exceeding the available supplies. Hence, the demand for labor to produce civilian goods increased until, according to a reliable estimate, total employment had risen recently to 55,300,000 or 600,000 more than at the war-time peak!

"Emergencies" Never End

To what extent was this due to government expenditure on public works? Hardly at all. Full employment having been provided almost entirely by private enterprise, the New Dealers had suddenly quit prescribing preventives of an emergency due to "lack of mass purchasing power" and "mass unemployment." But they had to discover an emergency due to something; they live on emergencies. Hence, they discovered there was an emergency due to a shortage of housing for veterans, and caused adoption of special legislation to remedy it. And this special legislation, by requiring the diversion of labor and materials from public works to "emergency" housing construction, *prevents,* at least temporarily, the huge public works program which the New Dealers formerly contended would be imperatively needed to prevent mass unemployment!

The New Dealers' plans of less than a year ago to compel large increases in wages and in government expenditures on public works were obviously and avowedly intended to prevent post-war *deflation and depression.* They have succeeded in forcing large inflationary increases in the wages of the one-fourth of the country's workers who belong to labor unions and in the prices of the industries that employ these workers. And what are the New Dealers trying by O. P. A. and other means to do now? They are trying now to prevent the post-war *inflation* which their measures to prevent a post-war *depression and deflation* have necessarily tended to cause.

Inflation "Control" Ineffective

Perhaps uncontrollable inflation will be avoided; perhaps it will not be. But of one thing we may be certain: it will not be prevented by New Deal policies. For the New Deal leaders and their economists will always be wrong in forecasting the nation's economic problems and in proposing solutions for them as long as we have a preponderantly private enterprise economy. They will always be wrong for the same reasons they always have been wrong. They were as wrong in 1933 when they prescribed general increases in wages *and prices* by N. R. A. to end the depression, and thereby protracted the depression and unemployment until the war began, as they were until recently in prescribing means of preventing deflation when the real danger was inflation.

And the reasons why they always have been wrong and are sure always to be wrong as long as the nation's economy is preponderantly one of private enterprise are these: only those who understand and believe in private enterprise can and will do what is necessary to remedy the ills of private enterprise and keep it usually healthy. But the New Dealers don't understand and do not believe in private enterprise. And those who do not understand and do not believe in private enterprise will always, when they can, adopt socialistic policies to solve economic problems. But true private enterprise is a *voluntary competitive* system, while every socialistic policy applies governmental *compulsion* to the national economy in one or more ways. And, obviously, you cannot improve the working of a necessarily voluntary system by applying governmental compulsion unless

for the purpose of preventing the application of compulsion by private pressure groups, such as labor monopolies or business monopolies. The more compulsory socialistic policies are applied the less voluntarism will remain in private enterprise and the worse results the national economy will produce.

Voluntary competitive private enterprise always *has* worked in this country excepting for brief periods. National socialism or communism, with its compulsions, *might* work—as before the war in Italy, Germany, Japan and Russia. A "mixed economy" of private enterprise and socialism won't work, because you can't mix voluntarism and compulsion without preventing both from working. The efforts of most New Dealers to "reform," "help" and "preserve" private enterprise by applying socialistic policies to it are inspired by economic ignorance. The similar efforts of the rest of them are inspired by a desire to destroy private enterprise and replace it with some form of communism or fascism.

Studies of Shop Maintenance Methods

A reduction in maintenance requirements is now a prime objective in the design of new rolling stock. At the same time too little attention is being paid to the possibilities of savings in handling existing equipment. It is worth while in these days of high labor and materials costs to study in detail the maintenance methods used to service and repair locomotives and cars and to analyze both the results and the costs.

Such studies can be made best by a staff department devoid of routine responsibilities that might limit its capacity to make a thorough investigation and having as its only interest the establishment of the highest standard of operation that can be reasonably attained. Such studies should be done by men familiar with the work under scrutiny and with a knowledge of the practical aspects of railroad operation. They can not be made by the supervisory forces charged with the responsibility of maintaining production. These forces are not only too busy with the everyday problems of keeping their assigned work moving on schedule but they have a natural reluctance to suggest changes that would reduce the manpower under their control. In addition they have a personal interest in their men that makes it impracticable for them to recommend the changes required by a cold appraisal of the facts.

Surveys of this kind would eliminate guesswork and answer questions about maintenance practices and costs that could be determined in no other manner. Such questions as: Is each man doing a day's work? Can savings in materials be made? Are the arbitrary mileage limits of inspections and renewals producing the best results? Would new or different equipment justify the expense? Are inefficient handling operations reducing the time available for more productive work? Is the required accuracy of workmanship being done in the maintenance of precision-built machines?

These questions are not products of the imagination. They and many other pertinent questions are being asked on one railroad and the answers are being given, after a detailed study by a small permanent staff whose goal is to find less expensive means of doing more and better work. It is a goal that is achieved most of the time because few railroad maintenance operations have reached standards so high that improvements are impossible.

Disaster Can Be Averted

The catastrophic decline in railroad earnings, caught in the "squeeze" of low rates plus high wages and materials prices, is nowhere more completely set forth than in the Interstate Commerce Commission's monthly statement of "selected income and balance sheet items"—the most recent, that for the first quarter of 1946, having been published on page 1247 of the June 22 issue of this paper.

In the accompanying table the percentage declines in income figures shown in this I. C. C. statement for the first three months of 1946 (compared to the first quarter of 1945) are applied to income items for the entire year 1945 to show what earnings for all of 1946 would be if the last three quarters should show the same dolorous relationship to 1945 that the first quarter did.

1946 Prospective Net Earnings

	% Reduction 1st quarter 1946 under 1st quarter 1945	1945 Actual Earnings Entire Year	1946 Est. Earnings if 1st Quarter Relationships Should Persist Throughout Year
Net Ry. Operating Income	56.5	$850,283,690	$369,873,405
Other Income	12.2	204,985,753	179,977,491
Total Income	...	1,055,269,443	549,850,896
Misc. Deductions from Income	1.6	38,587,636	37,970,234
Income Available for Fixed Charges	...	1,016,681,807	511,880,662
Total Fixed Charges	10.8	524,075,009	467,474,908
Income After Fixed Charges	...	492,606,798	44,405,754
Contingent Charges	8.3	45,222,120	41,468,684
Net Income	...	447,384,678	2,937,070

It will be noted that, on this basis, 1946 would produce net railway operating income of only $370 millions, or less than in 1938 which, except for 1932, was the worst year for net earnings since the termination of federal control in 1920. Actually, of course, it is hardly likely that 1946 earnings will follow their first quarter's pattern throughout the whole year. The minuscule rate increase allowed by the Commission will add, certainly, at least a few millions to the prospects for net railway operating income and net income as shown in the table. On the other hand, the 2½ cents in additional wage increases granted to employees in May was not retroactive —and hence, to the extent which it is not offset by more favorable factors, would serve further to reduce 1946 income prospects even below the sorry figures shown in this table.

There is nothing inevitable about these trends. They can be counteracted so that the disastrous results to which they point are never permitted to occur. It is only in the ignorance of, or failure to be properly impressed by them that danger lies. If those responsible for the costs of railroad service (i. e., the suppliers of labor and

materials and the railway officers who contract for the acquisition of goods and services) are brought to a full understanding of the significance of these figures, then correction will come from the expense side of these unfavorable trends. Similarly, if regulatory authorities and shippers are led to see the full meaning of such figures, then correction should also be speedily forthcoming from the revenue side.

Nothing is necessarily fatal in the situation as yet. Only the direction is fatal. Courage and intelligence can vary this direction.

What About Bus Competition?

That the American public, in the immediate years to come, will expend large sums as travel dollars is unquestioned. Just how this money will be apportioned between the railways, the bus lines and the air lines is a prediction which it would be difficult to make with assurance. All of these agencies of passenger transportation have been particularly active since the end of the war in the promotion of new ideas, the ordering of new equipment and, in general, the refurbishing of their services to meet and anticipate the demands of the travelers.

Recently, the Greyhound Corporation indulged in a complete overhauling of its top management. This important company is an organization of a large number of bus-operating companies, several of which are in part railway-owned. The operating companies within the group range from wholly-owned subsidiaries and so-called affiliates to an operating company like the Southeastern Greyhound Lines, one of the largest in the combination, which uses the Greyhound name, contributes to advertising expenditures and coordinates schedules, but to a very large extent determines its own policies.

In 1945, Greyhound operated 74,373 route-miles and piled up 371,494,525 bus-miles over these routes. Greyhound's principal rival has been the National Trailways, a collection of bus-operating companies (many of which are also railway affiliates) which is set up on a national basis. Recently, however, a new rival has appeared in the American Buslines, which is operating over 14,300 route-miles, of which 8,400 miles are represented by the bus-operating company that was originally formed as a subsidiary of the Chicago, Burlington & Quincy.

One of the principal problems facing the bus industry is the question of unionization and attendant increases in operating costs. The Amalgamated Association of Street, Electric & Motor Coach Employees already claims a majority among Greyhound employees. These prospective increases in costs are worrying the bus people, since it has been traditionally figured that bus fares must be kept on a basis at least 25 per cent less than railway coach fares if bus occupancy is to be maintained at a point where profits can be shown. In the past a figure of roughly ¾ cent a mile has been regarded as the minimum in bus fares under which a profit can be made. The threat of reduced railroad fares and rising costs is keeping bus executives awake at nights. The steps that the railways have taken in the way of ordering new equipment and going after large scale mass transportation in coaches are also a considerable source of concern to bus operators.

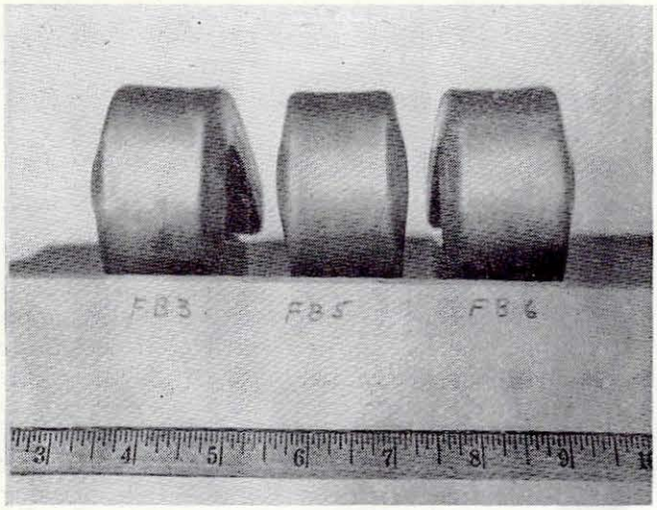
The Answer to Slides?

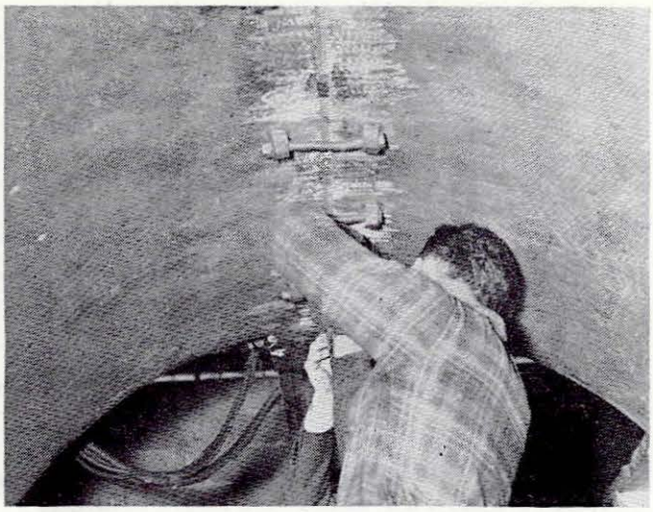
For many years railroad engineering departments have conducted an unrelenting search for effective means of controlling slides, a search that is continuing today with, if anything, greater vigor than ever before. Slides are, in the aggregate, a cause of enormous expense to the railroads in the form of direct costs incurred in repairing the damage produced by them and of indirect costs due to traffic restrictions or stoppages resulting from them. With labor costs increasing and with train schedules being shortened to cope with stiffening competition, the prevalence of slides is a thorn in the side of the railroads that has become something more than a mere irritation.

Slides affecting railroad property are of two general types—those in which material moving down from above fouls, or threatens to foul, the track, and those in which there is movement of the supporting material beneath the track, accompanied by lateral displacement or subsidence of the roadbed. In both cases the treatment of the trouble is difficult because it involves the control of forces that are not subject to exact analysis. The science of soil mechanics has made great progress in recent years but there is little indication so far that the findings are of much help in overcoming slides. Hence, the slide-control efforts of the railroads have, to a large extent, been of a "cut and try" nature, although efforts are made frequently to remove as much of the uncertainty as possible by conducting sub-soil investigations to determine the presence and origin of water, the existence of cleavage planes, and the general character of the underlying material.

In the knowledge that moisture is the primary troublemaker in many slides a great deal of effort has been concentrated on devising and installing sub-soil drainage systems, and frequently such expedients have proved effective. Other measures used are largely for the purpose of restraining the unstable material by means of rip-rap or retaining walls of various types, but all too often such devices are ultimately overpowered by the forces behind the slide. Because of this lack of permanence, some of the control measures used, requiring renewal or strengthening periodically, are, in themselves, a source of expense which may not be much less onerous than the evil they are intended to overcome.

Thus, in spite of the war that has been waged against them, slides involving railroad property are still a common ailment and a source of great expense. However, there is new hope for slide-plagued railroads in a method of control which, while used on only a limited scale to date, has produced encouraging results. This method involves grouting of the troublesome areas in the same manner that unstable roadbed is grouted. In overcoming soft track, it has proved itself effective and economical to the satisfaction of many railroads, and there is no apparent reason why it should not be equally as effective in stabilizing at least certain types of slides.

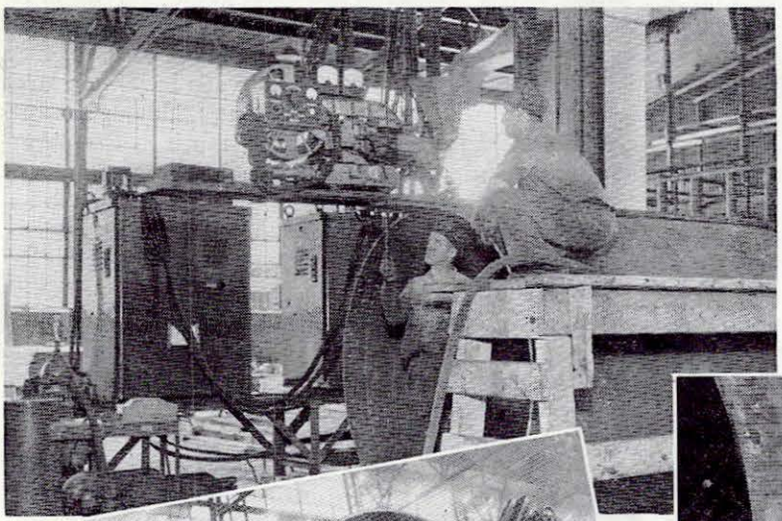




Left—Typical test specimens for qualifying procedures and operators before the actual welding of the boilers is started. Right—An assistant is holding a copper back-up to prevent a possible blow-through during the welding of the seam on the outside. Note the bolts and tack welds that assure the fit-up with a tolerance of .015 in.

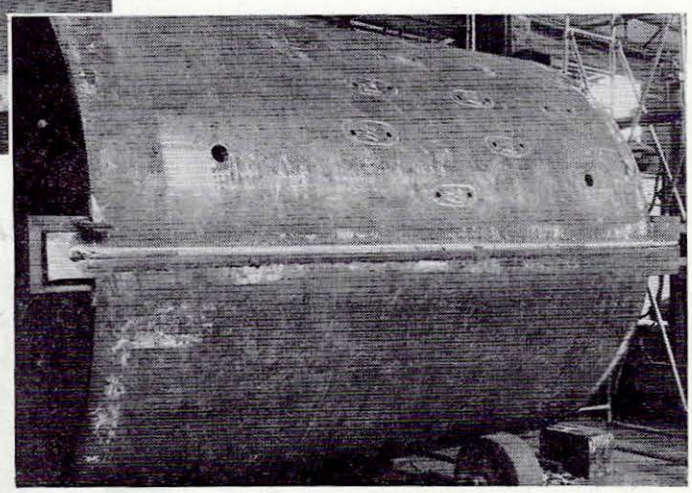
All-Welded Locomotive Boilers

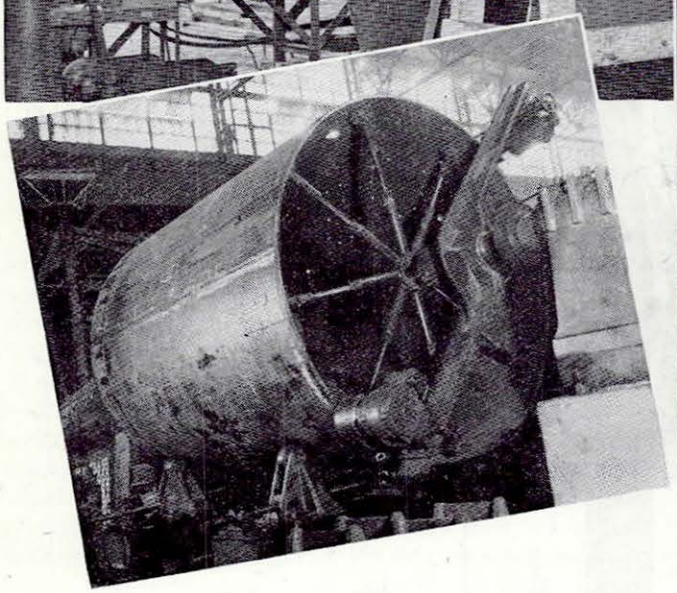
Techniques and facilities used at the American Locomotive Company's Schenectady plant for the fusion welding of boilers



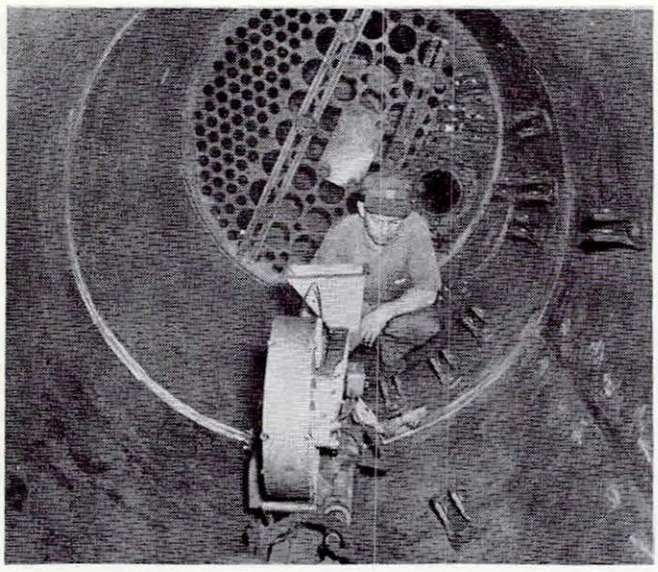
Left—Welding a longitudinal seam. The first pass is made on the outside of the boiler course, the second and last pass on the inside

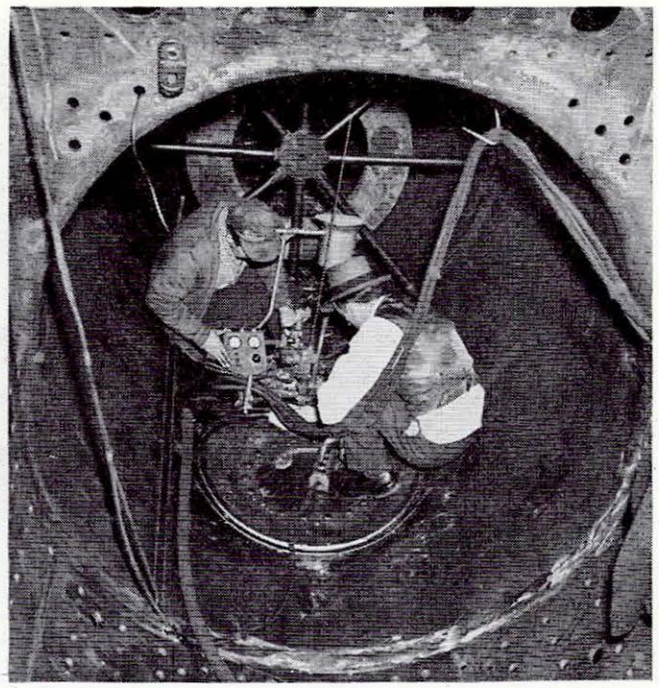
Below—A completed longitudinal weld with the plate for starting the weld at the left and a test coupon at the right of the weld





Left—A special grinding machine trues the joint faces of each course prior to the fitting up of the girth seams

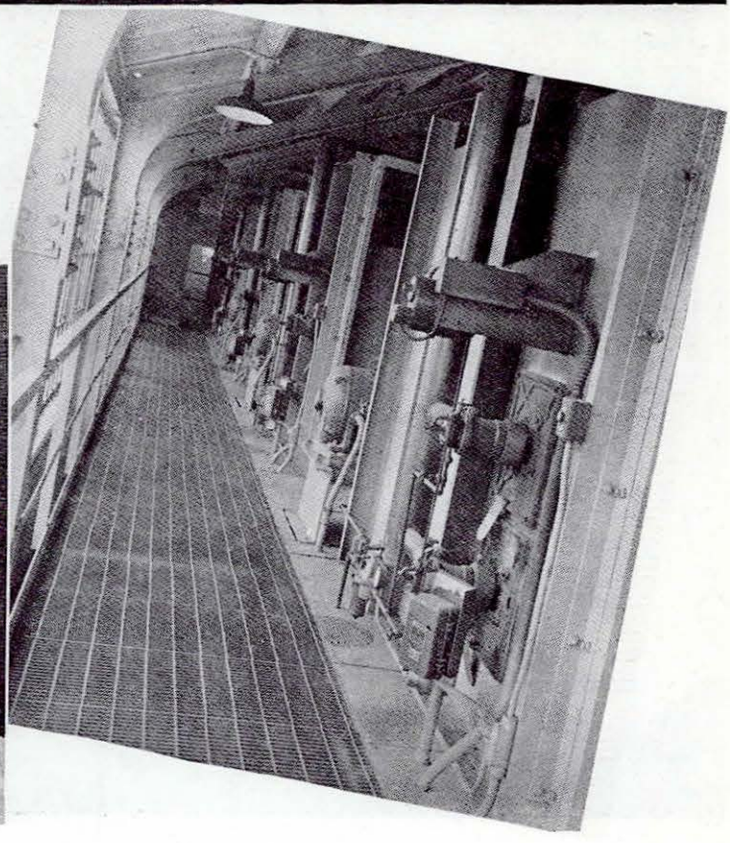


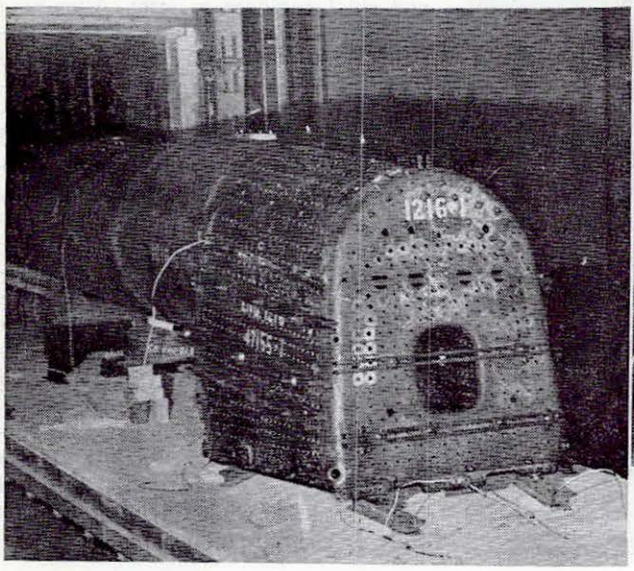


Above—The automatic welding machine is supported on a boom as the boiler is rotated during the welding of the girth seam. Right—The dome is welded by an automatic machine developed especially for the job

Right — X-ray pictures of welds are made to detect defects. The numbers and arrows pointing to prick-punch marks are used to locate all defects in the weld

Right—Oil burners along the cat-walk of the stress-relieving furnace. Below—One of the all-welded boiler shells about to enter the 80-ft. car-bottom furnace





Large A.S.T.M. Meeting Held at Buffalo

Forty-ninth annual convention features outstanding technical program including many reports and addresses having important bearing on the purchase and utilization of railway materials

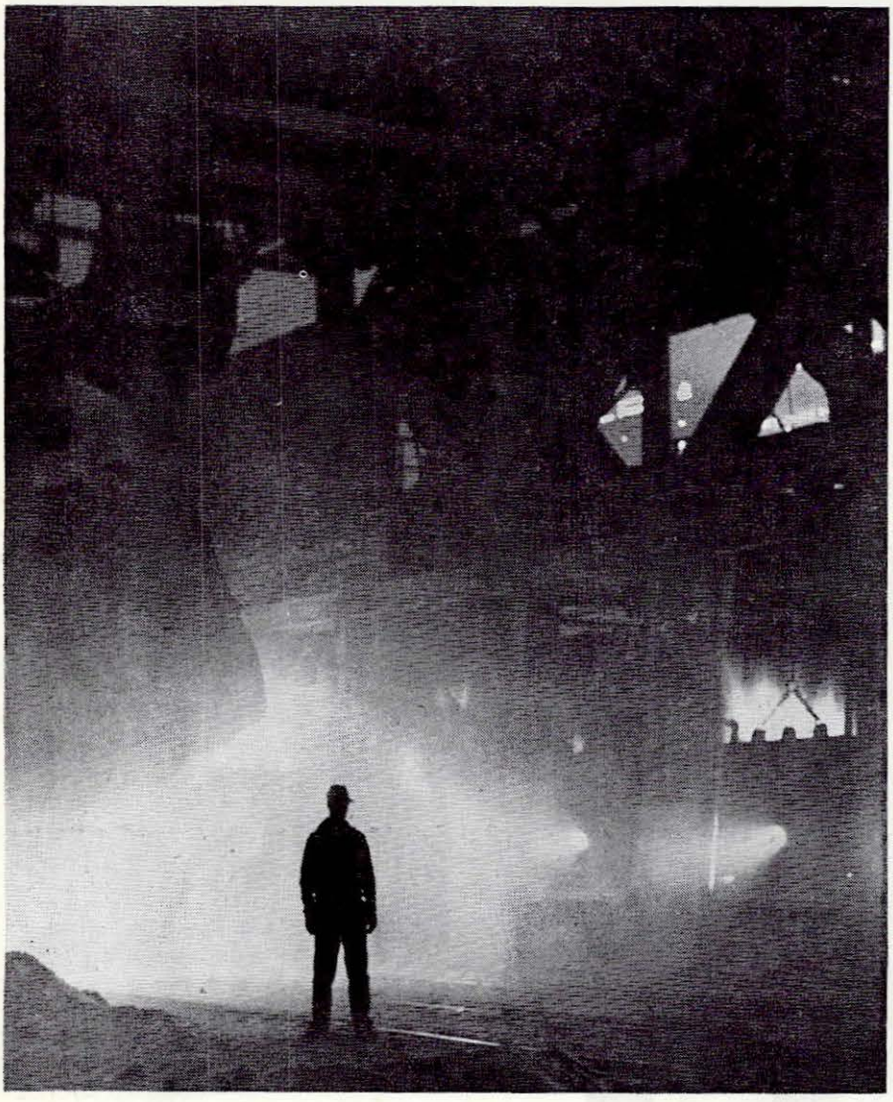
CLIMAXING one of the busiest years in its history, the American Society for Testing Materials held its forty-ninth annual convention at the Statler hotel, Buffalo, N. Y., on June 24-28. Included in the extensive program was the presentation of more than 150 technical papers and committee reports, which were grouped according to allied or related subjects for consideration at the various technical sessions. The meeting assumed increased importance this year in the light of the reconversion program now in progress throughout the country, and the attendant need for the effective utilization of materials and production facilities.

Indicative of the intense interest in the work of the society is the fact that, despite housing difficulties, a total of 1,825 members and guests registered at the meeting, an attendance surpassed only by the 2,063 registered at the annual meeting in New York in 1944. That the work accomplished at the current meeting was also at a peak is seen in the fact that approximately 50 new tentative standards were adopted, all representing new or recent work on the part of the committees. The annual meeting next year will be held at the Chalfonte-Haddon Hall, Atlantic City, N. J., on June 23-27.

This year's meeting, which was presided over by J. R. Townsend, president of the society and materials engineer, Bell Telephone Laboratories, comprised 24 technical sessions, in addition to the numerous committee and subcommittee group meetings. In conjunction with the meeting, the society also conducted its seventh exhibit of testing appliances and related equipment and its fifth annual photographic exhibit.

Most of the reports and many of the technical papers presented before the society were preprinted and distributed to members for written comment and discussion. This expedient, together with advance meetings of individual committees, made it possible for the work at the meeting to be carried on at a fast pace, and many problems relating to materials and tests were considered. Among the subjects of special interest to the railroad industry were those pertaining to steel, wrought and cast iron, certain non-ferrous metals, bearings, corrosion, cement and concrete, timber, and water.

Photo courtesy of Carnegie-Illinois Steel Corp.



New Officers Elected

In the letter-ballot election of officers for the ensuing year, the result of which was announced at the opening session, Arthur W. Carpenter, manager of testing laboratories, B. F. Goodrich Company, was elected president, and Richard L. Templin, assistant director of research and chief engineer of tests, Aluminum Company of America, was elected vice-president. Five new members of the board of directors were also elected, including L. H. Winkler, metallurgical engineer, Bethlehem Steel Company, and F. E. Richart, research professor of engineering materials, University of Illinois, who has held many engineering positions in the railway and public utility fields.

"Protective Organic Coatings as Engineering Materials" was the subject of the Edgar Marburg lecture this year, which was delivered by J. J. Mattiello, vice-president and technical director, Hilo Varnish Corporation, Brooklyn, N. Y. He stated that the growth of this industry, like that of many others, has been primarily a development of the arts, and pointed out that while empirical methods still play a significant part in the develop-

ment of new coatings, the industry's progress is guided mainly by the application of fundamental physical and chemical principles.

Under the impetus of the war effort, said Mr. Mattiello, the chemists, chemical engineers and the other technically trained men of the industry were given their first real opportunity to emphasize the chemical and engineering aspects of the protective coating industry. In the future, he continued, the industry will be confronted with many new chemically-synthesized film-forming materials, including some now in the offing and others that are probably not even on the horizon at present.

Fatigue Tests of Rail

Among the matters considered at a technical session devoted to steel and related subjects was a paper on "Fatigue Tests of Rail Steel Under Compressive Stress," by R. S. Jensen and H. F. Moore, University of Illinois. This paper described tests that were conducted on T-shaped specimens cut from a rail web under stress cycles ranging from compressive stress to tensile stress 20 per cent as great as the compressive stresses.

When such specimens failed, the fractures were found to have started on the compression side, and the compressive stresses were about 78 per cent higher than stresses in specimens subjected to cycles of completely-reversed bending stress. Under completely reversed stress the fractures started on the tension side of the specimen. Reduced stresses at fracture resulted in tests of specimens with stamped lettersat the critical section on the compression side. Although shot-peening sets up longitudinal compressive stress in the unstamped specimens, the fatigue strength of shot-peened specimens was approximately 32 per cent greater than for specimens in which the surface of the compression side was left as rolled.

The report of the Committee on Steel dealt with numerous changes detailed in the standard specifications for open hearth carbon-steel rail, and also the tentative specifications for heat-treated carbon and alloy-steel track bolts and nuts, and changes in the standard specifications for steel tie plates. All this work was carried on in close cooperation with the American Railway Engineering Association and an effort was made to have the actual requirements in the specifications of the two bodies coordinated so far as possible. These changes are to be made to bring the requirements in line with the latest practice and, concurrent with this action, war-time emergency provisions have been withdrawn.

The committee also accepted a proposed revised specification for multi-wear wrought-steel wheels. The changes made, it was explained, comprise a revision and combination of two existing specifications: one covering heat-treated wheels of three classes, and the other, a non-heat-treated grade. The new specification is expected to simplify ordering and production, and will bring the requirements substantially in line with those of the Association of American Railroads.

The report of the Committee on Steel contained numerous recommendations. A partial list of the specifications effected by these recommendations follows:

New Tentative Standards

Low-carbon nickel-steel plates for boilers and other pressure vessels.
Rolled carbon-steel locomotive frames.

Adoption of Tentative Standard as Standard

Heat-treated carbon and alloy-steel track bolts and nuts.

Revision of Standards, Immediate Adoption

Open-hearth carbon-steel rails.
Steel for bridges and buildings.
Boiler and firebox steel for locomotives.
Welded and seamless steel pipe.
Steel tie plates.
Carbon-steel plates for stationary boilers and other pressure vessels.
Lap-welded and seamless steel and lap-welded iron boiler tubes.
Structural steel for locomotives and cars.
Carbon-steel forgings for locomotives and cars.

Adoption as Standard of Tentative Revisions of Standards

Steel for bridges and buildings.

Withdrawal of Standards

Carbon-steel and alloy-steel castings for railroads.

Reaffirmation of Standards

Open-hearth steel girder rails of plain, grooved and guard types.
Low-carbon steel joint bars.
Medium-carbon steel joint bars.
High-carbon steel joint bars.
Quenched carbon-steel joint bars.
Soft steel track spikes.
Steel screw spikes.
Low-carbon steel track bolts and nuts.
Hot-worked, high-carbon steel tie plates.

Corrosion

Because of the increasing use of corrosion-resistant steels in the railway field, a feature of special interest to railway men was a symposium on Atmospheric Weathering of Corrosion-Resistant Steels. Subjects discussed during this session included exposure tests on corrosion-resistant steel, in a paper by I. V. Williams and K. G. Compton, Bell Telephone Laboratories; atmospheric corrosion tests on corrosion-resistant steel, by Grant L. Snair, Jr., Allegheny Ludlum Steel Corporation; atmospheric corrosion tests on high-chromium steel, by W. O. Binder and C. M. Brown, Union Carbide & Carbon Research Laboratories; marine exposure tests of corrosion-resistant steel sheet, by W. H. Muchler, National Bureau of Standards; atmospheric corrosion tests of corrosion-resistant steel wires, by A. P. Jahn, Bell Telephone Laboratories; and corrosion-resistant steel for architectural and structural applications, by H. A. Grove, Republic Steel Corporation. The last-mentioned paper, among other things, related the favorable results of an inspection made of a modern railroad train constructed of corrosion-resistant steel. Another point stressed during the symposium was that steels containing substantial amounts of chromium are finding increased applications in fields where resistance to atmospheric corrosion is important, because of the passivating effect that chromium imparts to steel under oxidizing conditions.

Presented during a session on non-ferrous metals and allied subjects was the report of the Committee on Copper and Copper Alloys, Cast and Wrought. Changes in specifications proposed by this committee included the withdrawal of emergency alternate provisions in the specifications for bronze castings for turntables and movable bridges and for bearing and expansion plates for fixed bridges. This committee also recommended revisions for immediate adoption in a number of standard specifications, included the following:

Copper plates for locomotive fireboxes.
Copper bars for locomotive staybolts.
Bronze castings in the rough for locomotive wearing parts.
Car and tender journal bearings, lined.
Rolled copper-alloy bearing and expansion plates for bridges and other structural uses.

Also presented during the session on non-ferrous metals was the report of the Committee on Light Metals and Alloys, Cast and Wrought, which included several recommendations regarding aluminum and aluminum-magnesium products. This committee submitted new tentative specifications for aluminum-alloy sheets and plates, aluminum-alloy drawn seamless tubing, and aluminum-alloy bars, rods and wire. This group also recommended the withdrawal of five tentative specifications, all of which are of either direct or indirect interest to railroads, including those for aluminum-alloy (Duralumin) sheet and plate; aluminum sheet and plate; aluminum-manganese alloy sheet and plate; aluminum-alloy (Duralumin) bars, rods, wire and shapes; and aluminum-magnesium chromium alloy sheet and plate.

Cement and Masonry Materials

Information of interest to the railroads was presented in the form of various committee reports and papers during a session on cement, concrete, lime, refractories and other masonry materials. In its report, the Committee on Cement presented a method of test for air con-

tent of portland-cement mortar, and a lean mortar bar test as a measure of the sulphate resistance of portland cement. It also discussed the effects of alkalies in portland cement on the durability of concrete and on volume changes in, and the soundness of, portland cement. This committee also submitted several new tentative specifications and tests which have been accepted, including (1) a specification for portland-blast-furnace slag cement, (2) a test for determining the fineness of portland cement by the air-permeability apparatus, and (3) a test for determining Darex-air-entraining agent for portland cement. The committee also recommended for immediate adoption revisions in the specifications for portland cement.

Also presented during the session on concrete was a paper by H. A. LaRue, University of Missouri, on "Modulus of Elasticity of Aggregates and Its Effect on Concrete," which outlined tests conducted regarding the durability of aggregates in concrete construction. According to Mr. LaRue, aggregates with high moduli of elasticity produce concrete with correspondingly higher moduli than do stones which exhibit lower values.

Tests of Concrete

In discussing the use of the dynamic modulus of elasticity in predicting the 28-day flexural strength of concrete, E. F. Preece, U. S. Engineer Office, declared that the so-called sonic analysis has been used extensively to measure the deterioration of the flexural strength of concrete specimens subject to freezing and thawing, and that it is equally useful in determining the increase in flexural strength of concrete specimens with age. When the dynamic modulus at different ages is plotted against the respective age in days, the resulting curves have a well-defined pattern. Once this pattern is determined, it is practical to estimate the 28-day dynamic modulus within fairly close limits when the specimen is but 10 to 12 days old. This estimated value can then be used to determine the probable 28-day flexural strength from the dynamic modulus-flexural strength relationship which has been shown to be essentially linear in character.

A symposium on procedures for making freezing-and-thawing tests of concrete, sponsored by the Committee on Concrete and Concrete Aggregates, afforded an opportunity for round-table discussion of the procedures used by different investigators in evaluating the durability of concrete. Following a paper by M. O. Withey, University of Wisconsin, there were ten short contributions by leading authorities. Topics discussed in detail included principal objectives in making freezing-and-thawing tests, test procedures, and methods used for evaluating the results of freezing and thawing (e. g., sonic methods, length changes).

Bituminous Roofing Materials

During a session on bituminous materials and related subjects, the Committee on Bituminous Waterproofing and Roofing Materials recommended revisions in the tentative specifications for (1) asphalt roofing surfaced with powdered talc or mica; (2) asphalt roofing surfaced with coarse mineral granules; and (3) methods of sampling bituminous materials. Also, revisions for immediate adoption were recommended in the standard specifications for wide selvage asphalt roofing surfaced with coarse mineral granules, and in those for asphalt siding surfacd with coarse mineral granules. In addition, it was recommended that the specification for asphalt shingles surfaced with coarse mineral granules be adopted as standard in place of tentative.

Reporting during a session on nonferrous metals and miscellaneous materials, the Committee on Wood, of which Dr. Hermann Von Schrenk, consulting timber engineer, is chairman, reported that it is either revising or plans to revise during the coming year the standard specifications for round timber piles; structural wood joint and plank, beams, stringers, posts and timbers; and zinc chloride. The standard methods for testing small clear specimens of timber, for testing the specific gravity of creosote, and definitions of terms relating to timber are receiving similar consideration.

Among the papers presented during a symposium on fatigue was one by W. C. Lewis, Forest Products Laboratory, on "Fatigue of Wood and Glued Wood Construction," which stated that an understanding of the fatigue behavior of wood and glued wood constructions has required the development of proper testing machines and testing procedures. Some of the techniques and test methods have been perfected and a significant number of tests have been made in bending, tension parallel to the grain, and shear, on specimens of wood, plywood and wood with glued joints. Tests to date indicate that failures of wood specimens in fatigue have exactly the same appearance as those of corresponding specimens tested statically.

The report of the Committee of Water for Industrial Uses was largely a review of the activities of the several subcommittees handling this subject, but this report was supplemented by a report by the Joint Research Committee on Boiler Feedwater Studies. The committee recommended new tentative methods for testing dissolved oxygen in industrial waters; a revision of the tentative test for tendency of boiler water to cause embrittlement cracking of steel; and revisions for immediate adoption in the standard method of reporting results of analysis of industrial waters.

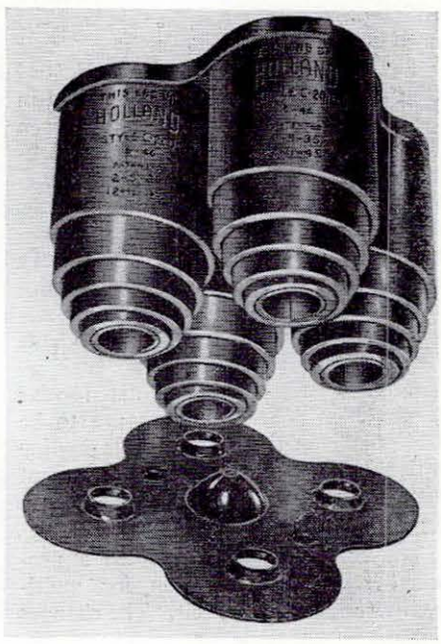
* * *

Volute Truck Spring

The Holland volute truck spring is designed to provide the soft spring action that was found to be necessary for high speeds from the truck tests conducted by the A. A. R. in 1939. The spring has a deflection rate of 4,800 lb. per in., and gives both load-carrying and snubbing actions.

These springs are said to have retained approximately the same dynamic load-carrying capacity and snubbing action after nine months and 134,000 miles of service as when new. The test springs were applied to tenders, as tender service was considered to be the most varying and severe that springs have to withstand on railway equipment, due to the constantly changing load.

Application of these springs can be made without any change in existing trucks by removing the old springs and installing the volute springs. New bottom spring plates are required. Volute truck springs are manufactured by the Holland Company, 332 S. Michigan Avenue, Chicago 4.



Volute springs for high-speed service have both load-carrying and snubbing characteristics

"Agreed Charges" Prove Popular in Britain

A device whereby economies of dependable patronage of rail service are shared in part by customers

By G. LLOYD WILSON

Professor of Transportation and Public Utilities, University of Pennsylvania

AGREED rates or charges were inaugurated in Great Britain in 1934, authorized by the Road and Rail Traffic Act, 1933, which became effective January 1, 1934. Under the terms of this part of the act [1] a railway company is permitted to make charges for all or any part of a trader's [2] merchandise as may be agreed upon by him and the railway company, subject to requirements which will be discussed later, and to the approval of the Railway Rates Tribunal. Prior to the passage of this act all British railway rates and charges were made up on a point-to-point basis for each movement of traffic, either as standard rates or "exceptional" rates.

Standard rates are constructed upon a basis of charges which increase as the length of haul increases, although not necessarily in direct proportion to distance. These rates are fixed by the Railway Rates Tribunal under the provisions of the Railway Act of 1921 and can be changed only by action of the Tribunal.

The exceptional rates correspond approximately to exceptions to the classification or commodity rates of the American carriers. In establishing exceptional rates, which are less than the standard rates, British railways are required by law to insure that the "exceptionals" accord equality of treatment under similar conditions to all traders interested in the shipment of the commodities covered by such rates. A railway may not arrange an exceptional rate for one trader which would accord him undue preference and unduly prejudice another shipping the same kind of goods. The obligations of British railways, subject to the Railways Act, to eschew unjust and unreasonable discrimination or undue preference or prejudice coincide with the obligations of railroads of the United States subject to the Interstate Commerce Act.

The British Road and Rail Traffic Act of 1933, however, empowers railways to make such charges as they see fit by agreements or contracts with traders who actually pay the transportation charges, subject to the conditions and approval which will be discussed later. The provisions of the Railways Act, 1921, with respect to equality of treatment of, and to preference and prejudice to, traders referred to above in connection with "exceptional rates" are not applicable in connection with these "agreed charges."

[1] Road and Rail Traffic Act, 1933, Part II, Sections 37, 38, and 39, 23 and 24.

[2] This, of course, is the convenient British term, designating either a shipper or a consignee.

The Basis of Agreed Charges

In arriving at the basis of the agreed charge to be made by agreemeut with any trader with respect to any particular traffic, a study is made of the traffic for a representative period of time. This period is selected by the trader and the railway as one which will be representative of the trader's normal traffic. This study examines the present rates paid for transportation by railway and by other means of transportation. The results of this rate study are used to negotiate an agreed rate mutually equitable and satisfactory to the trader and the railway. The agreed rates may be made with respect to:

a. All of the trader's traffic;
b. All of his traffic by railway freight service;
c. Any specified part of the traffic;
d. All of a trader's traffic by freight service and by passenger train service; or
e. All of a trader's traffic by passenger train service only.

Normally, agreed rates are made upon a per-ton charge in freight service, and a per-package or a per-shipment or per-consignment charge in passenger service, although several other bases are used. Other such bases include: (1), a percentage of the invoice price or value of the goods; (2), a per-package or per-shipment or consignment basis, subject to an average rate per shipment on an average weight per shipment agreed upon by the carrier and trader; and (3), a fixed total amount for a given period of time.

In fixing the agreed rates consideration is given to a number of factors, such as the inclusion or exclusion of collection and delivery services; the risk of loss and damage assumed by the carriers or by the traders; and seasonal variations in the volume of traffic.

There is obtained from the traders and from the carriers' freight station agents detailed information with respect to the nature of the traffic; the types of containers used; its points of origin and destination; its volume and seasonal variations; the present charges paid; and the services required, such as collection, delivery, and rail-head distribution service. Questionnaires are used to develop this information as aids in arriving at the bases of the agreed charges. One form is used for agreed charges in connection with freight service, a copy of the questions being shown in the accompanying tabulation.

Some of agreed charge arrangements in effect in Great Britain provide for the carriage of some of the traffic by highway. Since the charges by highway service in Great Britain are not subject to regulation by the Railway Rates Tribunal or any other government regulatory body, it is customary to include in the agreements a condition obligating the trader to give his entire volume of traffic embraced in the agreement to the railway—or to several railways if the agreement is made jointly with several railways—so that the arrangements for the road transport are made by the railways at the same agreed charge which is applicable to both the railway and highway service. The railway uses for these highway services its own subsidiary motor carriers or road transport companies operating under contract with the railways.

After the unit price or charge is agreed upon by the railways and the traders, the period of time within which the agreements are to remain in force is agreed upon. This period is usually twelve months, although under the Road and Rail Traffic Act agreements can be made without restrictions as to the period of time. If the agreements are made without time limit, a conditions is attached giving either the railway or the trader the right to terminate the agreement upon due notice to the other party.

After the information contained in the questionnaires is considered by the freight or passenger manager of the railway which is considering the negotiation of an agreement, all pertinent data are forwarded to the Railway Clearing House at London, in which all British railways are represented. The matter is referred to a committee of the Clearing House, comprising accounting and traffic officers of the carriers, which decides upon the amount of the charge and the terms and conditions to be incorpor-

Agreed Charges—Goods Questionnaire

Firm._____ Address._____

1. Address from which traffic is despatched._____
2. Is any traffic despatched in the name of other firms which is to be included in the Agreed Charge, if so give names and addresses?
3. (a) Traffic to be brought under scheme (giving Classification description).
   (b) Does the Firm forward other traffic, if so, give particulars?
4. (a) Sending Station or Stations.
   (b) (i) Area to which traffic is at present despatched, i. e., Great Britain, England and Wales or a defined area.
   (ii) Area to be covered by the Agreed Charge.
5. How is traffic dealt with at forwarding point, i. e.,
   All traffic carted by Firm.
   All traffic carted by Railway Companies.
   Part carted by Firm and part by Railway Companies; if so, is the Firm prepared to leave whole of the cartage to Railway Companies?
   Ex Private Siding (name allowance or haulage charge, if any; give details particularly for less than truck loads).
6. (a) Is traffic consigned at C. R., O. R. or on a damageable Goods Note. If portion at O. R. name the articles concerned?
   (b) What conditions, C. R. or O. R. should be attached to the Agreed Charge?
7. Is traffic consigned "Paid to Station," "Carriage Paid" or "Paid Home"?
8. If Agreed Charge required on "per package" basis, what are the weights of the heaviest and lightest packages?
9. Do the senders forward by road, coastwise steamer or canal?
10. Is there any traffic which the Firm definitely require to be excluded from Agreed Charge arrangement, e. g., traffic transported by own motors to a defined area, is so, give particulars?
11. (a) What conditions should be attached to Agreed Charge, e. g., C. & D., Delivered, &c.?
    (b) What delivery conditions are to be applied to the Agreed Charge, i. e., No. 1, 2, 3, 4 or 5?
12. State on what basis the particulars in the Summary are being compiled, e. g., all C. & D., S. to S., C. & S., S. & D., or P. S.?
13. Do the particulars in the Summary include all charges to comply with the reply to question 11?
14. Do the Firm use Railheads, if so, name them?
15. Are Railway Containers used?
16. Is the whole of the traffic forwarded "paid," if not what proportion is consigned "To Pay"?
    Give reasons why traffic is consigned "To Pay" and state if Firm is prepared to consign all traffic "paid" in which case the "To Pay" particulars should be collated separately?
17. (a) (i) What type of consignment note is used, i. e., Company's single entry, multiple entry or triplicate form, or Firm's own form?
    (ii) Are these consecutively numbered, *or* Is Firm prepared to adopt a consecutively numbered form of consignment note in duplicate or triplicate if not already using that method?
    (b) Is the Firm prepared to accept daily totals of weight or package only *or*
    Is the Firm prepared to accept monthly skeleton accounts, shewing date, pro number of consignment note, weight or number of packages, and totals of charges calculated at the Agreed figure for the accounting period?
    If the firm is not prepared to accept either of these methods, state the reason why and what further information is required?
18. Do Firm forward traffic to Liverpool and or Birkenhead; if so, is the charge for delivery paid by Sender?
19. Do the particulars in the Summary include Returned Empty traffic FORWARDED by the applicant?
20. To what extent does the Trader forward by Passenger Train service (approximate information will suffice)? Is there any Agreed Charge in operation or being negotiated for such traffic?
21. Is traffic forwarded to Shows or Exhibitions? If so, extra cartage charges and special terminal charges in respect of such traffic must be excluded from the particulars in the Summary.
22. Is traffic seasonal? If so, give particulars.
23. Give monthly payments on forwarded traffic for a 12 months period.
24. Months selected as representative for extraction of basis particulars.
25. Inwards traffic
    1. Approximate tonnage by (a) Rail (b) Road.
    2. Description of principal traffics.
    3. Principal points from which received?
    4. If not received by rail, and the Firm is responsible for carriage, give reason?
26. General Remarks (to be made overleaf, if necessary).

ated in the agreement. An offer is then made, usually through the secretary of the Railway Clearing House, to the trader. If accepted, a formal agreement is drawn up and executed by the trader and by the Railway Clearing House on behalf of the railway or railways parties to the agreement. A copy of a typical agreement for an agreed charge is shown herewith.

Within seven days after the consummation of the formal agreement, it is submitted to the Railway Rates Tribunal for consideration with an application for approval. The Tribunal then directs that public notice of the proposed agreement be given. The notice gives the particulars with respect to the proposed arrangement. Copies of the agreements are deposited at the office of the Railway Rates Tribunal and at twelve places in Great Britain where the agreements may be inspected by the public upon request. Copies of the proposed agreements, moreover, may be obtained at a nominal charge from the lawyers who are acting in the railways' behalf.

The purpose of requiring that public notice be given is to afford any trader, who ships goods similar to any of the freight covered by the proposed agreements and who considers his business to be detrimentally affected, an opportunity to file his objection with the Railway Rates Tribunal, or to apply for an agreed charge agreement for the transportation of his similar goods. The Railway Rates Tribunal has jurisdiction in its discretion either to refuse to approve the agreed charge agreements to which objections are filed or to fix a charge for the transportation of the objectors' merchandise. The Tribunal may order the arrangement for an objecting trader whether he ships his goods over the same or a different railway from the one via which the proposed agreed charge arrangement is sought to be made applicable.

After the period for filing objections to proposed agreements has expired, the

A Typical Agreed Charge Contract

AGREEMENT made BETWEEN the LONDON AND NORTH EASTERN RAILWAY COMPANY, (hereinafter called "the Company") AND THE BRITON BRUSH CO., LTD., of WYMONDHAM, NORFOLK (hereinafter called "the Trader") for the carriage of merchandise under an agreed charge as specified hereunder.

A. DESCRIPTION OF TRAFFIC—

Brushes; Bristles; Fibre; Feather Dusters; Hair; Mops; Scourers; Sponge Cloths; Wash Leathers; Broom and Brush Heads and Blocks, wooden without hair; Broom Handles; Advertising Material (hereinafter called "the said traffic").

B. STATIONS AND/OR PLACES WHERE APPLICABLE—

From Private Siding at Wymondham and Wymondham Goods Station to all Goods Stations and Depots in Great Britain.

AGREED CHARGE—

58/0d. per ton (minimum charge per consignment as for 28 lb.).

CONDITIONS ATTACHING TO THE AGREED CHARGE—

1. The Trader undertakes to hand to the Company the whole of the said traffic for carriage as provided in Paragraph B, provided that this undertaking does not apply to—
   (a) any of the said traffic forwarded to London and Norwich in the Trader's own vehicles.
   (b) any consignment of the said traffic of a less value than £5, the carriage charges in respect of which are not payable by the Trader and which is despatched by the Trader "Carriage Forward".
2. The Agreed Charge will apply to all the said traffic carried by the Company other than that which by express agreement between the Company and the Trader is excluded owing to it being conveyed under an agreed charge made by the Company to another trader and approved by the Railway Rates Tribunal, and shall be paid by the Trader.
3. The Agreed Charge includes the delivery of the said traffic at places where the Companies have cartage facilities but only within the ordinary and out-boundary cartage areas.
4. In the case of any of the said traffic consigned to the Isle of Wight, the Orkney and Shetland Islands and the Western Islands and Highlands of Scotland, the Agreed Charge does not include carriage or delivery beyond the Mainland port.
5. The Agreed Charge does not include the special terminal or special delivery charges on any of the said traffic consigned to Shows or Exhibitions.
6. The Agreed Charge does not include the provision by the Company of Containers.
7. The said traffic will be carried by the Company at Company's Risk subject to the application of the appropriate Standard Terms and Conditions of Carriage of Merchandise by Merchandise Train.
8. The Trader shall notify the Company of any material change in the character of his business or in the character of the traffic carried under the Agreed Charge.

PERIOD FOR WHICH AGREED CHARGE IS TO OPERATE—

1st January, 1937, to 31st December, 1937.

THIS AGREEMENT IS SUBJECT TO THE APPROVAL OF THE RAILWAY RATES TRIBUNAL.

SIGNED for and on behalf of the above Railway Company,
Secretary, Railway Clearing House.

SIGNED for and on behalf of the above Trader,
Date

Railway Rates Tribunal assigns a date for the consideration of the application for an agreed charge arrangement. The customary period allowed for filing of objections is 21 days from the date of the publication of the public notice. Objecting traders and the public generally are privileged to attend the Tribunal's hearings on these applications. The hearings are formal. Sworn testimony is adduced in support of all statements necessary to enable the Tribunal to arrive at its decision with respect to the approval or disapproval of the agreed charge applications. Any traders who have filed objections to the granting of the agreed charge or who have applied to the Tribunal for a charge to be fixed upon their traffic have the right to be heard, and to introduce into the formal record of the proceedings evidence to support their position.

Objections or petitions for fixing of similar agreed rate agreements may be filed also by any representative body of traders engaged in the shipping of goods similar to those covered by any proposed agreement. Such representative bodies have the same rights, under the Road and Rail Traffic Act, 1933, as individual shippers to appear and to be heard in support of their objections or applications. Provision is made in the Road and Rail Traffic Act, 1933, for the special protection of the interests of port or harbor authorities, and dock companies or authorities. The act provides that, if any such organization owning or operating facilities of this kind has reason to believe that any agreed charge arrangement has the effect of placing a port, harbor or dock at an undue disadvantage compared with another similar facility from or to which traffic may be transported by the railways parties to the agreement, it may file a complaint with the Railway and Canal Commissioners. This body is given jurisdiction to hear the matter and decide the complaint, ordering, if necessary, that the undue disadvantage be removed.[3]

Competing with Ocean Shipping

The Road and Rail Traffic Act, 1933, provides for a special procedure to be followed whenever agreed charges or exceptional rates are made by railways in competition with coastwise shipping enterprises. The Act provides that if at any time the representation is made to the Minister of Transport, by any body which, in the opinion of the Board of Trade, is representative of the interests of the coastwise shipping, that agreed charges or exceptional rates of railway companies made in competition with coastal carriers tend to place the coastal carriers at an undue or unfair disadvantage, or are inadequate considering cost of service, the Minister of Transport is directed to consult with the Board of Trade.

If, after such consultation, it appears to the Minister of Transport that, *prima facie*, the complaint is one in which the national interests should be investigated, the matter is referred by the Minister of Transport to the Railway Rates Tribunal for investigation and review. The Tribunal is directed to investigate the rates, cost of service, and other relevant circumstances. Consideration is directed to be given to the charges by rail, water, highway, or competition of these routes. If the Tribunal finds that the proposed rates are unfair to coastwise carriers or

[3] Road and Rail Traffic Act, 1933, Part II, Section 37, (10); Railway and Canal Traffic Act, 1854, as Amended. Section 2 and Railway and Canal Traffic Act, 1888, Section 27.

are inadequate, it may order the rates canceled or modified so as to avoid these defects.

A shipping panel, consisting of six persons nominated by the president of the Board of Trade as representatives of the interests of the coastwise carriers, is provided for in the act. The act provides for the addition to the Railway Rates Tribunal of one member selected by the Minister of Transport from a shipping panel.[4]

The Railway Rates Tribunal is directed by the Road and Rail Traffic Act, 1933, not to approve an agreed charge if the object sought to be attained by the arrangement could be secured adequately by exceptional rates. All pertinent circumstances must be considered in deciding this question. Consideration must be given, specifically, to the effect of the proposed agreements upon the net revenues of the railway companies affected, as well as to the business of the traders who object to the agreements.[5]

Action by Rates Tribunal

After the applications and objections have been duly considered, the Railway Rates Tribunal either grants or denies the applications, or fixes the basis for agreed charges upon request, or permits the establishment of an arrangement subject to agreed modifications. The arrangements, as has been stated, may be authorized for a fixed period of time or for an unlimited period. If an agreed change is ordered set up for a trader who objects to a proposed agreement made for another, the duration of such an arrangement cannot be ordered for a longer period of time than that for which the agreed charges complained of are fixed by the Tribunal.

The protection of the interests of traders by the Tribunal is continued after agreements have been permitted to go into effect. The Act provides that at any time after the expiration of one year from the date of approval of an agreed rate, a trader who believes his business has been detrimentally affected or a representative body of traders may apply to the Tribunal to order the withdrawal of the arrangement or to modify it as the Tribunal may deem proper and the railways and traders affected may agree.

If the Tribunal has fixed a charge for the benefit of a trader who has complained of an agreed charge, he may not make application with respect to the charge insofar as it relates to the same or similar kinds of merchandise covered by the agreed charge fixed by the Tribunal.

[4] Road and Rail Traffic Act, 1933, Part II, Section 39.
[5] *Ibid*, Part II, Section 37, (8).

If the Tribunal withdraws its approval of an agreed charge or approves one subject to modifications, the charges fixed for any traders who have complained of the charge either become inoperative or are subject to such modifications as the Tribunal fixes.[6] If existing agreements expire and are renewed, the approval of the Railway Rates Tribunal must be sought and obtained.

Instruction to Railway Agents

After an agreed charge arrangement has been accepted by the parties approved by the Railway Rates Tribunal, instructions are given by the general offices of the railway companies to their respective agents at stations of origin and destination to govern the billing of the shipments covered by the agreements. These instructions are drawn up by the accounting departments in consultation with the traffic departments of the railways. The railway agents are informed of the trader with whom each agreement has been negotiated, the types of traffic covered by the agreed charge, the amount of the charge, the area in which the agreement is operative, collection and delivery arrangements, and the assumption of the risk of loss or damage by carrier or shipper.

The trader bills the goods on "consignment notes," corresponding to bills of lading, on which are shown the name and address of the consignee, the destination, description of the goods and the weight of the consignment. The railway's invoice, or waybill, which accompanies each shipment shows the name of the shipper, the name and address of the consignee, the destination of the shipment, the description of the traffic, the weight, and a statement indicating whether the agreed charge includes delivery at the railway station at destination or cartage or delivery to the consignee's place of business. These instructions constitute the authority for the sending and receiving stations to accept shipments upon the basis of agreed charges.

No charges are shown on the railway's invoice, and they are not abstracted or summarized. Monthly statements are rendered by the forwarding stations to the general offices of the railways.

A monthly statement of account is rendered to the shipper by the originating station in which are shown the dates of the consignment, the total weight or number of packages, and the charge arrived at by applying the unit rate to the unit of shipment—weight or number of packages. The charges upon individual shipments are not indicated. In the agreed rate arrangements applicable to passenger train services, special adhesive labels are attached to each package in place of the invoices used in freight service.

[6] *Ibid*, Part II, Section 37, (7).

Inter-Railway Settlements

The agreed rate accounts are settled between railways handling joint traffic under these arrangements by means of monthly statements rendered by each railway to the Railway Clearing House, identifying the shipments and the service rendered with respect to each shipment by the respective railroads. Settlements between the railways are effected in connection with freight traffic on the same basis as the division of revenues at ordinary rates; and in passenger train service the receipts are divided in bulk on a percentage basis agreed upon by the railways. Test periods are arranged by the accounting and traffic officers of the carriers for the purpose of determining the basis for the division of revenues between the railways.

During the period in which agreed charge arrangements are in effect the railway companies make tests to obtain information to determine whether the existing charge should be continued after the expiration of the original agreement, or a revision should be made to adjust the charge to a more equitable basis. In the case of agreements without expiry dates, tests are necessary to determine whether or not a modification in the charge is necessary.

The accounting and traffic officers of the carriers decide, after the agreements have been negotiated, when the special weight invoicing will commence, the test period to determine divisions, and the periods when tests are to be taken to determine the adequacy of the agreed charge.

Throughout the first month of an agreed charge the shipments are charged in the usual manner. Commencing with the second month of the arrangement the special invoices referred to above, which show only the weight of the consignments or number of packages, are used. The invoices, as has been stated, do not show either the rates or charges.

The railways, at intervals, take sample tests by calculating the rates which, during the best period, would have been applied to the traffic in the absence of an agreed rate. This sampling shows whether or not there have been material changes in the average length of hauls, in average weights of shipments, and the types of goods shipped. If the tests show material changes in the characteristics of the traffic, appropriate changes are made in the agreed charges, subject to the approval of the Railway Rates Tribunal which already has been outlined.

The number of agreed rate arrangements and the number of traders using

this method of purchasing transportation service serve to show the increased use of the arrangements. The increase in the percentage relationship of the revenues derived from agreed rates to total revenues from all freight traffic, including all freight train receipts and parcels and miscellaneous receipts, points to the growing importance of this scheme of pricing transportation to the carriers' revenues.

The growth of agreed charges in Great Britain since 1934 has been substantial, measured by the number of agreements in effect, the annual revenue derived from the services performed under the plan, and the percentage of the revenues derived from agreed charges compared with the total revenues of British railways derived from parcels and merchandise traffic and merchandise traffic transported by goods train. This includes the revenues earned from merchandise freight and passenger train services but excludes the revenues from low-rated traffic in Classes 1 to 6, including coal, coke, patent fuel and livestock.

The figures in Table I show that the number of agreed charge arrangements

Table I—Agreed Rate Arrangements in Effect in Great Britain 1934-1944

End of Year	No. of Agreements in Effect	Gross Revenue: Amt. of Revenue per Year	Percentage of Receipts from Agreed Charges of Merchandise Traffic Receipts, Goods, and Passenger Trains
1934	184	£1,560,000	3.00%
1935	298	£2,459,000	4.71%
1936	527	£3,226,000	5.95%
1937	667	£3,709,000	6.67%
1938	920	£4,264,000	8.06%
1939	972	£5,078,000	Not published
1940	949	£4,724,000	Not published
1941	879	£4,036,000	Not published
1942	815	£3,913,000	Not published
1943	1,996*	£4,589,000	Not published
1944	2,202†	Not yet available	Not published

* Including 1,037 "returned empties" agreements.
† Including 1,108 "returned empties" agreements.
Source: Data supplied by Agreed Charges Committee, Railway Clearing House, London, 1945, supplied to author through Railway Research Service, letter, September 26, 1945.

in effect has increased from 184 in 1934 to 2,202 in 1944. The large increase in the number of agreements in effect in 1943 and 1944 in comparison with years prior to that date is due to a change in the method of handling "returned empty" containers. In order to save clerical expenses incident to the collection of charges, the railways required in 1943 that "returned empties" would be accepted for transportation only if the charges were paid at the sending stations at the time of shipment. A number of traders who used the "returned empty" service and who formerly received their empty containers on a to-pay or collect freight charges basis negotiated agreed charges arrangements with the railways to cover the transportation of the empty containers in cases where they paid for the charges at destination.

The figures in Table I show that the annual revenues from agreed charges increased from £1,560,000 or 3 per cent of the revenues derived from parcel and merchandise traffic handled by passenger and freight trains to £4,264,000, or in 1938 over 8 per cent of merchandise traffic revenues, the latest year for which these data have been published by the Ministry of Transport.

Table II shows the number of applications made for agreed charge arrangements, the number of traders involved in the arrangements, and the number of applications approved by the Railway Rates Tribunal. The sharp increase in 1940

Table II — Agreed Rates Applications Approved by Railway Rates Tribunal in Great Britain 1934-1944

Year	Number of Applications Filed	Number of Applications Approved	Number of Traders Involved
1934	184	148	151
1935	383	371	330
1936	567	519	505
1937	706	707	688
1938	818	824	774
1939	547	449	542
1940	1,432*	1,389*	1,358*
1941	507	683	493
1942	604	588	577
1943	1,785†	1,785†	1,686†
1944	767	737	747

* Mainly consequent upon increase in railway rates May 1, 1940.
† Mainly accounted for by 1,037 agreed charges in connection with "returned empty" containers consequent to carriage paid order, 1944.
Source: Data supplied by Agreed Charges Committee, Railway Clearing House, London, 1945, supplied to author through Railway Research Service, letter September 26, 1945.

in the number of applications made and approved and in the traders involved was due mainly to the increase in railway rates which became effective May 1, 1940. The increases in 1943 were a consequence of the order requiring the payment of charges at the shipping points on returned empty containers. The figures indicate a steady and substantial growth in the use of agreed charges from 1934 to 1944.

In *Woolworth's Agreed Charge,* the Railway Rates Tribunal held that under the Road and Rail Traffic Act, 1933, the railways could properly make an agreement to carry the whole of a trader's traffic wherever required for a uniform charge based upon a percentage of the purchase or invoice price of the goods shipped. It held that the objection that such an agreement would make it impossible for competing traders to compare their own charges with an agreed charge on this basis would be equally applicable to a charge on a tonnage or package rate. The Tribunal stated that: "It is not necessary that such an agreement should contain a provision for limiting the advantage which may be expected to accrue to the trader. A comparison between a rate based on the purchase price of a certain commodity and a rate based on mileage and weight of a consignment of the same commodity is fallacious. . . . An agreement may be approved though it gives liberty to the parties to agree (without seeking the approval of the Tribunal) for the exclusion of certain traffic from the operation of the agreement."

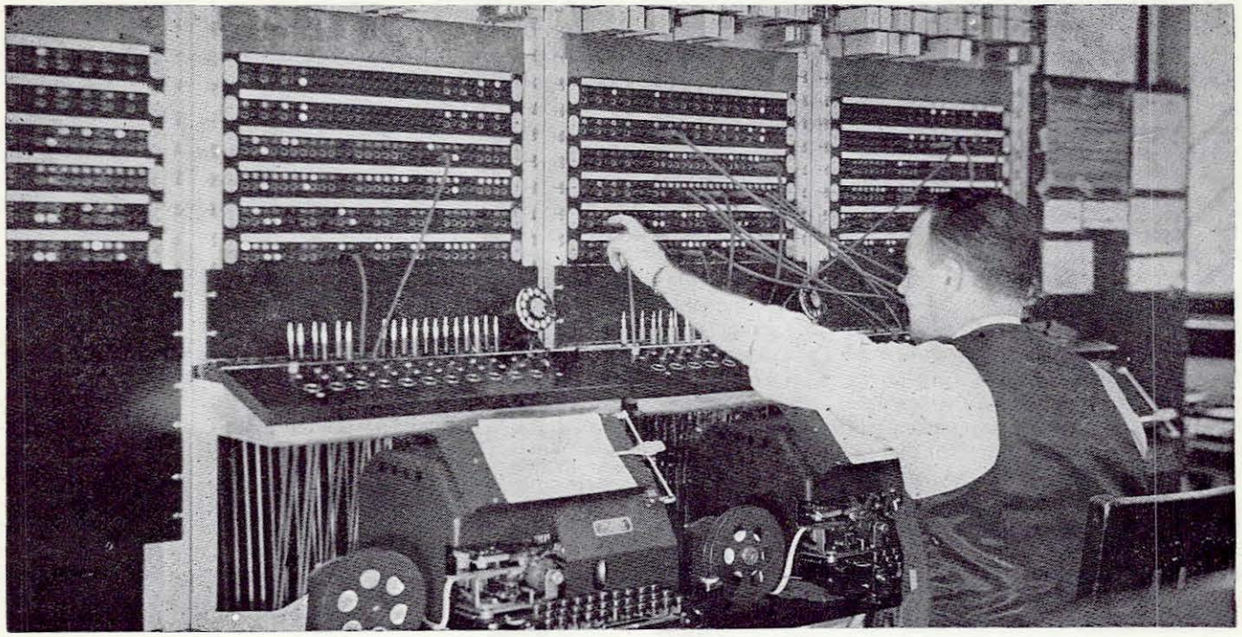
The agreed charge here approved was for the traffic dispatched for sale or use to the 513 stores of F. W. Woolworth & Co., Ltd., in various places in Great Britain, the Channel Islands and the Isle of Man from over 2,000 different suppliers at an agreed charge of 4.25 per cent of the purchase price paid by Woolworth for the goods.[7]

The agreed charge arrangements approved by the Railway Rates Tribunal made by the parties in approved form do not limit the railway companies to carriage by railroad. In *Cheswick Products Agreed Charge,* in 1934, the Railway Rates Tribunal approved an agreement of the railways and shippers for the carriage of traffic from nine stations in London and tin plate from five stations in South Wales to Brentford, and empty containers from Brentford to these stations, which contemplated that the shipper would make his own deliveries by motor vehicles within a radius of approximately 25 miles, and that the railways reserved the right to transport the goods themselves by highway services in emergencies.[8]

In commenting upon the growth of agreed charge arrangements, C. E. R. Sherrington, secretary of the British Railway Research Service, in a letter to this writer states: "There is no doubt that agreed charges have achieved a considerable measure of success in this country and are popular with railways and traders. . . . An indication of the growth of agreed charges may be gathered from the fact that by the end of 1937, 522 agreed charges were in operation, representing a gross revenue of slightly over £4,000,000; by March, 1939, the number of agreed charges in force had risen to 850. In 1942 alone nearly 600 agreed charges were approved by the Railway Rates Tribunal. . . .

"By their very nature agreed charges are particularly suitable to the higher rated traffics passing in small consignments (l.c.l. freight), and almost all of the arrangements are in respect of traffic of this nature. There is no legal reason, however, why similar arrangements should not be made to cover wagonload [i.e., carload] traffic or bulk commodities, though in practice, traffic of this nature is usually adequately provided for by exceptional rates of the more normal type."[9]

[7] Railway Rates Tribunal, (22 Railway, Canal and Road Traffic Cases 90), 1934, Sweet and Maxwell, Ltd., London, 1935.
[8] Railway Rates Tribunal, (22 Railway, Canal and Road Traffic Cases 61), 1934, Sweet and Maxwell, Ltd., London, 1935.
[9] Letter C. E. R. Sherrington, secretary, Railway Research Service, to the writer dated London, May 24, 1945.



The teletypewriter switchboard in the Chicago office

Teletypewriter Switching Network Installed on Pennsylvania

Novel system includes switchboards in 13 cities which are interconnected by trunks to permit direct working, thus eliminating the delays occasioned by repeating

THE Pennsylvania has a program to provide through teletypewriter switching service between 13 terminals, the most recent project being to convert "GF" office in Chicago from a relay message office to a teletypewriter switching center. Other switching centers are at New York, Philadelphia, Baltimore, Harrisburg, Altoona, Buffalo, Pittsburgh, Cleveland, Columbus, Toledo, Cincinnati and Indianapolis. The teletypewriter switchboards in these offices are manually operated and, by means of cord circuits, direct communication is made possible between 270 teletypewriters located in 182 offices on the Pennsylvania System, a total average of 200,000 messages and reports being handled daily.

This system of using switching centers for interconnecting teletypewriters so extensively is new in railroad practice. The teletypewriter system not only handles ordinary messages but provides information concerning important freight and passenger train movements as well as the consist of trains. These reports are invaluable to all departments in the efficient handling of railroad traffic, and permit giving the public prompt information and service.

In the Chicago office, for example, each incoming trunk circuit and each teletype machine that terminates there is equipped with individual line terminals with corresponding jacks and lamps in the switchboard to permit signaling and setting up connections. The man in charge of the switchboard uses his teletypewriter machine to receive requests for connections to be established or to request connections through trunks to the men in charge of similar teletypewriter switchboards in the 12 other cities.

The teletypewriter switching facilities permit the sending of messages directly from point of origin to one or more destination offices simultaneously, thus eliminating delays incident to messenger service, manual relay and repeated transmissions. For example, if an operator in Chicago has several messages to be sent to Philadelphia, he informs the man in charge of the switchboard, who arranges for a connection to be established through to Philadelphia. The Philadelphia operator sets up conference connections and advises the Chicago office to go ahead. Then the messages are sent directly to teletypewriter receiving machines at that destination.

The teletypewriter equipment at all the offices is geared for operation at 60 words per minute. Because of other duties which may interfere with the continuity of operation, train consists from outlying yard offices are received on a reperforator in the Chicago office, and then sent by tape transmission at the rate of 60 words per minute to all addresses. This practice permits full-time utilization of the trunks.

The promptness with which messages can be handled in this system depends on the number of trunk line circuits available between the offices in the 13 cities. The Pennsylvania owns 33,700 miles of teletypewriter circuits, of which 7,700 are physical and 26,000 are superimposed. Additional trunks can be leased if needed to handle increased message traffic. Alternate routes are available for use when the trunks on the direct route are busy or in trouble.

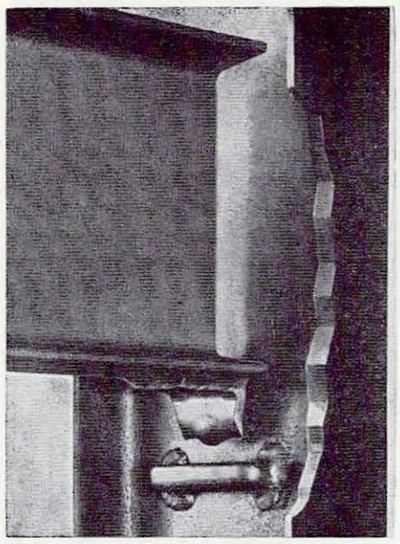
The new teletypewriter switching center office in Chicago is equipped with fluorescent lighting, soundproofing, Venetian blinds and an air-conditioning unit which filters the air as well as maintains the temperature and humidity within desired limits. These improvements have resulted in higher employee efficiency as well as fewer failures of equipment due to the reduction of dirt and dust particles in the air.

This new teletypewriter switching center in Chicago, as well as similar centers in the other cities, was engineered and installed by Pennsylvania personnel.

Erection System

The Saxe welded erection system, which has been used satisfactorily in the construction of many buildings since its development more than 10 years ago, has been further improved to simplify the erection and lower the erection costs of welded steel-frame structures, according to J. H. Williams & Co., Buffalo, N. Y. It is said that during the war this system helped save steel, reduced fabrication and erection costs, and greatly speeded up the work in many instances.

The Saxe welded erection system employs the "hook-and-eye" principle, using drop-forged steel erection seats and clips to locate and hold steel members firmly in place for welding. The seats and clips are made from selected forging stock, furnished to S. A. E.-1020 specifications, and are shop-welded to the members, where they assure positive assembly. Individual connections will support loads up to 20,000 lb. or more, and for heavier loads they can be used in duplicate or triplicate.



This beam, with a Saxe clip welded to it, is being lowered into position to engage a Saxe seat, welded to a column

Drop-End Balancer

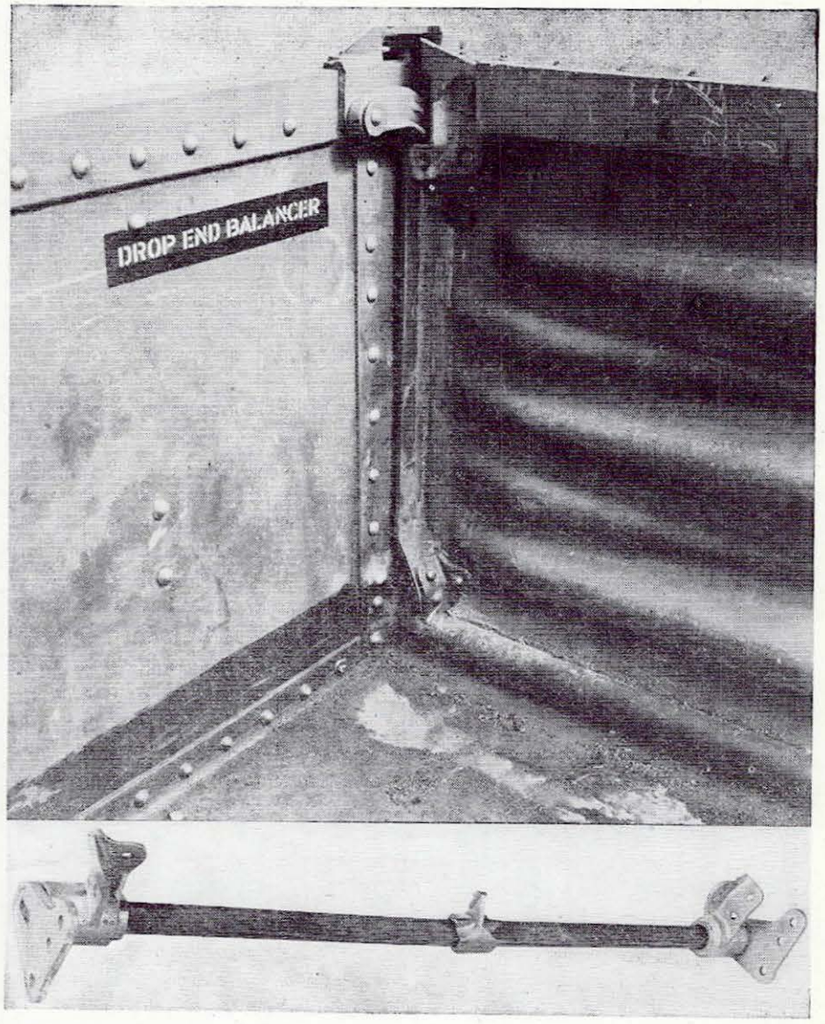
To enable one man to close the heaviest drop ends without special tools, the Wine Railway Appliance Company, Toledo 9, Ohio, has developed a drop end balancer for installation on any type of gondola car.

Torsion bars located within a heavy enclosure on the bottom of the drop end make easy lifting possible. The bars are anchored to the center of the drop end by a casting, and extend outward to both sides through the enclosure and hinge castings. Hinged trunnions riveted to the car body anchor the torsion bars on the outer ends. As the drop end is lowered, the torsion bar anchor in the center turns the middle of the torsion bar while the outer ends are held stationary. When the drop end reaches a horizontal position the torsion bars are at maximum load and thereby lessen the initial effort required to raise the drop end. In the closed position, there is enough tension remaining in the bars to retain the drop end in its vertical position, thus eliminating danger of the end accidentally dropping on the operator while being secured.

The enclosure containing the torsion bars is adaptable to any design of drop end; the bottom portion of the old end is removed and the new enclosure welded in place. This enclosure replaces the lower flange of the present drop end and protects the bars from the lading and the weather. It is made with a round bottom so that any accumulation of foreign matter will not interfere with the proper operation of the drop end. The round bottom prevents lever action and the subsequent difficulty in securing the locks which would result if the ends had been forced out of position by lever action.

Emulsion for Waterproofing

It is reported by the Socony-Vacuum Oil Company, New York, that leakage through the outside walls of brick and stucco buildings can be prevented by the application of a transparent waterproofing wax emulsion, known as S/V Ceremul W, which is said to possess a number of advantages. The emulsion is diluted in one or two parts of water, depending upon the porosity of the surface to which it is to be applied, and is put on with a brush. Only one application is required, but application is prefer-



Top: The drop end on a gondola car equipped with the Wine Drop End Balancer—Bottom: Torsion bars showing center casting, hinge castings, and trunnion castings

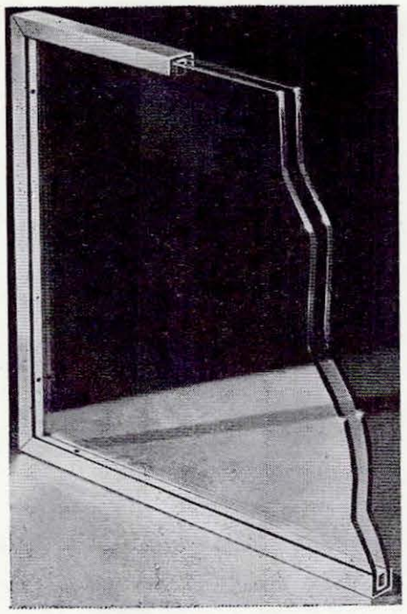
able in warm weather so that rapid drying will result.

Among the advantages claimed for S/V Ceremul W are that it breaks down slowly and does not gum up the applicator, and that it produces a long-lasting weather-proofing that is not re-emulsified by rain, affected by heat or cold, or cracked by vibration. Coatings applied more than seven years ago are said to be still successfully resisting the effects of dampness and rain. Furthermore, according to controlled tests conducted by the Bureau of Standards, the emulsion coating demonstrated its effectiveness under conditions far more severe than those generally encountered.

Insulating Window Unit

Development of a new type, efficient, double-glazed insulating window unit, known as Twindow, for industrial, business, commercial, and special uses, has been announced by the Pittsburgh Plate Glass Company, Pittsburgh, Pa. Twindows are integral insulating units of two or more plates of glass enclosing ¼ in. or ½ in. of hermetically-sealed air space. One of the revolutionary features of Twindow is the use of hollow aluminum tubing to separate and hold the glass plates in position. The entire unit is framed with light-gage stainless steel channels, with the channel legs extending ⅜ in. inward on the surface of the glass to give maximum protection.

It is said that the Twindow virtually prevents condensation and, because of its efficiency as a thermal unit, permits the use of larger windows with reduced heating and air-conditioning costs. The hermetically-sealed dead air in the space between the plates of glass is held at atmospheric pressure, and is dehydrated by means of a drying agent within the aluminum spacer tubing, which is said to provide added insurance against the slightest vapor diffusion, even under abnormal atmospheric conditions.



A cut-away, sectional view of a Twindow insulating unit

Clear, polished plate glass is used in the standard Twindow units, but they can be fabricated with special glasses to meet practically all needs. For example, special units can be made of Solex heat-absorbing glass and plate glass, which are particularly adaptable where the direct rays of the sun pose a problem. Where an extremely high degree of impact resistance is desired, a unit employing Herculite heat-tempered glass can be furnished, a type of glass with approximately four times the impact strength of plate. Many other combinations of special glasses can be furnished in Twindow units, including polished wire, heavy plate, figured ornamental, sandblasted, blue and flesh-tinted, and Pennvernon window glass. It is said that units can be installed with minimum difficulty in steel, wood, or special sash.

Lank-Teco Truss

The Timber Engineering Company, Washington, D. C., has announced a new type of timber truss which is claimed to be the most economical truss for its span and load-carrying capacity that has yet been designed. Known as the Lank-Teco truss, because of its development by E. S. Lank, it is a combination pitched-flat type truss embodying both the Teco truss design and the "rod-and-block" type, using steel rods for tension members in the web system.

Comparing it with a conventional Pratt truss having the same span and loading, the Lank-Teco truss is claimed to require only half the lumber and hardware, to weigh half as much, to entail half the amount of fabrication, and to have less than half the deflection under load. This economy of design is said to be accomplished by the arrangement employed for the truss members, the use of lapped splices, and the use of the new Teco standard double-bevel split rings. The truss members are reported to be so arranged that they are fully utilized and, in places of high stress, are so disposed that four adjacent faces of the intersecting members can be utilized for the placement of connectors. Lapped splices are said to result in reduced hardware requirements and less truss deflection.

A test was conducted at the testing laboratory of the Timber Engineering Company with a 50-ft. Lank-Teco truss designed to carry a load of 40 lb. per sq. ft. over a 16-ft. spacing. This truss, which was provided with a camber of 2 in. in the bottom chord, carried the full design load for more than six months with a total deflection of one inch. The truss was then tested to failure and, at twice the design load, the deflection was two inches. Failure occurred at 2¼ times the design load by a shearing out at the splice in the bottom cord.

It is pointed out that a truss design of this type should be well-suited for supporting the roofs of warehouses, freight-houses, equipment sheds, garages, and similar structures where unobstructed areas are desirable.

This truss, of the new Lank-Teco construction, carried 2¼ times its design load when tested to failure

COMMUNICATIONS

Wants Window Spacing to Match Seat Spacing

BRONX, N. Y.

TO THE EDITOR:

In a copy of the *Railway Age* dated January 12, 1946, is an article, "Symposium on Passenger Car Design," which I read with interest, especially the section, "Seat Spacing" (page 149).

I have ridden several times in de luxe chair cars on both the New York Central and the Milwaukee roads. The seats are comfortable and I have no criticism of the spacing of the seats—and I am 6 ft. 1 in. I do not like the way the seats are related to the large windows now in vogue. The car designer and the seat spacer show no correlation in that too many of the seats do not have a *direct window outlook*. This is important to travelers like myself and wife, who want to see everything possible and who found great discomfort in having to incline the seat to look out back of the window division or to lean forward to see out ahead of the window division. Naturally, the seats located so as to give a good view are occupied first and those delayed in getting in one of these newer type coaches get the less desirable ones. My idea is that there should be worked out a seating arrangement whereby *all* seats will be desirable—and I am writing to you believing that your influence would be helpful, for soon there will be new and a plentiful number of modern cars and a traveling public eager to see all of America possible.

EARLE T. SORRENSEN

Maintenance Officers Are Alert and Cooperative

LOUISVILLE, KY.

TO THE EDITOR:

Your editorial in the June 1 issue of *Railway Age,* based on the comments of two railway supply men criticizing railroad maintenance of way men:

What you brought out in your editorial as coming from these supply men sounds very much like what I have heard from certain supply men who are attempting to sell equipment that our maintenance men do not consider practical; in other words, which increases the cost of doing work over the way we are doing it at present.

I have never found railway maintenance men reluctant to adopt new equipment when such equipment will enable them to perform more and better work at less cost. However, we do not rush in to purchase equipment that some supply men attempt to crowd down our throats, when from actual experience we find that such equipment is not practical.

I have been in close touch with railway maintenance and with manufacturers of maintenance of way equipment for the past 25 years, and during that time it has been my experience that railway maintenance men are continually behind the supply men to develop and furnish them proper equipment to carry on their work. A good example of this is the grouting machine for the pressure grouting of soft track. When we first started doing this work we were unable to locate any machine on the market and had to make one in our own shops. Most of the improvements on other equipment, including motor cars, have come from users on the railroad lines rather than from the manufacturers.

I challenge the statement made by the two supply men, as brought out in your editorial, and would welcome an opportunity to discuss it with them personally. I believe you should give the maintenance of way officials a chance to present their side before condemning them editorially.

L. S. ADAMS
Assistant Chief Engineer
Louisville & Nashville

Left to right: T/3 James Fryat, assistant roundhouse foreman (machinist, T. & P.); T/Sgt. Andrew Hopkins, roundhouse foreman (assistant roundhouse foreman, C. & O.); Kun Yung, Mr. Bock, Korean Railroad roundhouse foreman; T/3 Harold A. Lakey, assistant roundhouse foreman (machinist, S. A. L.); interpreter

Railroading in Korea

FUSAN, KOREA

TO THE EDITOR:

I was sent over here with the 770th Railway Operating Battalion and am a foreman on the Korean State Railroad. Capt. Edward J. Bluto, train dispatcher, New York Central, is battalion commander. mander.

This railroad is standard gage and left-hand operated. Stations are approximately eight miles apart and only one train at a time can enter between stations. The operators control manual semaphore signals at each cabin. Ninety-pound rail is used. One big mistake they make is not staggering their rail joints; the joints couple up opposite each other. They have good roadbed and excellent tunnels and bridges.

There are four classes of locomotives here that were actually made in America. Our shop is operating 18 trains a day (24 hr.). Last month we moved 78,000 tons of coal along with other traffic, and passenger trains operated to carry returning Korean families from Japan. Kun Yung (Mr. Bock) is the engine master of this shop and 77 miles of division. The enginehouse controls locomotives on the road as well as their maintenance and repair.

All enginemen must come up from laborer, helper, mechanic, fireman, second class engineer and first class engineer; it takes about five years to learn to be an engineer. Three firemen and two enginemen are carried in an engine crew.

They have the best passenger equipment in the Orient. The first-class cars are like our standard Pullmans of about five years ago. They are really swell. The trains cover a 77-mile division in 2 hr. 33 min. The average length of a freight train is 25 cars.

We have just put on a streamline train, copied from the "City of Miami" — all orange. It is a first-class train hauled by a modern Pacific engine, and its name is the "Korean Liberator." It makes a 276-mile trip from Seoul to Fusan in 9 hr. 40 min. We change engines two times.

We are all working to help these people improve their system and they appreciate it very much and I am glad that I have had an opportunity to help them. They are a truly good people. What they need is education, which has been denied them for many years.

ANDREW HOPKINS

Generous Words From Col. Johnson

WASHINGTON, D. C.

TO THE EDITOR:

I want to thank you sincerely for the cooperation and support your organization gave this office during the recent transportation emergency, in disseminating the information to the far corners of the United States.

Because of the nature of the emergency, we were up against a serious problem in getting the text of the various orders to the shipping public. Your organization as always played a very important part in making this quick coverage possible.

J. M. JOHNSON, DIRECTOR
Office of Defense Transportation

GENERAL NEWS

Increased Loadings in 3rd Quarter Seen

Shipper boards expect traffic to be above last year's in 22 of 30 groups

Freight car loadings in the third quarter of 1946 are expected to be 2.7 per cent above those in the same period in 1945, according to estimates by the 13 Shippers Advisory Boards.

On the basis of those estimates, loadings of the 30 principal commodities will be 7,986,492 cars in the third quarter, compared with 7,773,308 actual car loadings for the same commodities in the corresponding period last year. Ten of the 13 boards estimate an increase in loadings for the third quarter compared with the same period in 1945 and three estimate decreases.

The tabulation below shows actual loadings for each district in the third quarter of 1945, the estimated loadings for the third quarter of 1946, and the percentage of increase or decrease.

Shippers' Advisory Board	Actual Loadings Third Quarter 1945	Estimated Loadings Third Quarter 1946	Per cent Increase
New England	98,252	110,957	12.9
Atlantic States	710,562	782,946	10.3
Allegheny	1,045,227	1,096,533	4.9
Ohio	970,113	973,062	0.3
Southeastern	772,398	816,188	5.7
Great Lakes	540,828	607,729	12.4
Central Western	320,458	293.567	8.4 d.
Mid-West	934,669	975.866	4.4
Northwest	801,724	783,096	2.3 d.
Trans-Missouri-Kansas	440,455	441,293	0.2
Southwest	549,804	469,745	14.6 d.
Pacific Coast	346,401	379,429	9.5
Pacific Northwest	242,417	256,081	5.6
Total	7,773,308	7,986,492	2.7

The 13 boards expect an increase in the third quarter compared with last year in the loading of 22 of the commodities listed, and a decrease in 8. Among those showing the greatest increases are the following: Automobiles and trucks, 112.1 per cent; cement, 47.7 per cent; agricultural implements and vehicles other than automobiles, 20.7 per cent; brick and clay products, 20.2 per cent; fresh vegetables other than potatoes, 13.5 per cent; lime and plaster, 12.9 per cent; gravel, sand and stone, 12.7 per cent; paper, paperboard and prepared roofing, 11.5 per cent; cottonseed and products, except oil, 9.4 per cent; cotton, 8.8 per cent; fertilizers of all kinds, 6.9 per cent; potatoes, 6.8 per cent; ore and concentrates, 5.7 per cent; iron and steel, 4.7 per cent; other metals, 5.8 per cent; canned food products, 4.5 per cent; and coal and coke, 3.6 per cent.

Commodities for which decreases are estimated and the amount of the decrease include the following: hay, straw and alfalfa, 21.2 per cent; chemicals and explosives, 20.1 per cent; grain, 16.8 per cent; flour, meal, and other mill products, 13.4 per cent; petroleum and petroleum products, 12.8 per cent; citrus fruits, 11.3 per cent; livestock, 5.2 per cent; and poultry and dairy products, 1.8 per cent.

Business Papers to Change Trim Size

As a result of recommendations adopted at the May meeting in Hot Springs, Va., of the Associated Business Papers, and accepted at the June meeting in Atlantic City, N. J., of the National Industrial Advertisers Association, the standard trim size of business magazines has been fixed at 8¼ in. by 11¼ in. This change will become effective for the *Railway Age* and other periodicals published by the Simmons-Boardman Publishing Corporation with the September numbers. There will be no change in the dimensions of the type page.

P. M. Streamliners to Commence Operations This Month

The Pere Marquette's new Diesel-powered, 7-car streamliners will be placed in operation late this month on a 2-hr., 40 min., schedule over the 148 miles between Detroit, Mich., and Grand Rapids, according to an announcement by R. J. Bowman, president of the road.

Each of the two new trains, to be named the "Pere Marquette," will make three single trips daily except Sunday and a single round-trip on Sunday, providing three weekday trips in each direction and two Sunday trips, in lieu of the two weekday steam schedules and one Sunday schedule each way now being operated.

Each of the trains, which are being built at the Chicago plant of the Pullman-Standard Car Manufacturing Company, will consists of mail car, baggage car, three coaches, dining-lounge car, and an observation-lounge coach.

European Express Service Resumed

Military transportation report indicates railroad progress in U. S. German zone

Restoration of passenger train service over pre-war routes between Paris and Vienna, via the "Orient Express," and between Paris and Prague is noted in the latest monthly transportation report of the military governor of the U. S. Zone of Occupation in Germany. Service also was inaugurated on the Munich-Kassel and the Frankfurt-Hamburg runs.

According to the report, further increases in the number of passenger trains for German civilians were not possible during April because of the coal shortage. However, cars for German civilians were added to a new U. S. military train between Frankfurt and Stuttgart, although cars on another train operating between Frankfurt-am-Main and Wesermuende were withdrawn. Military train service between Munich and Rome also was discontinued on April 20.

The report shows that a total of 5,146 trains, including 3,069 passenger, 1,826 freight and 251 miscellaneous, were operated daily in the U. S. zone during April, an increase of 218 a day over the previous month. A total of 92,836 trains were operated during March, as compared with 80,139 in February.

Fares Increased—"On April 1," the report continues, "a rise in fares was put into effect consisting of 100 per cent on normal traffic and 50 per cent on certain monthly, weekly and miscellaneous categories. In spite of this action, passenger traffic remained heavy, and at Easter there was congestion on long distance runs. Trains during the month were overcrowded and repeatedly passengers were left. A large amount of baggage, belonging mainly to refugees and repatriated passengers, was handled. Express traffic was heavy at the beginning of the period, food being the main item. In order to avoid shifting of less-than-carload traffic to express, consignments were confined to top priority shipments. During the partial embargo on express shipments, goods were repeatedly shipped as baggage."

In its discussion of freight service, the report discloses that starting July 1 expedited freight connections between Wesermuende and southern Germany, a route used to transport fish, were to become effective. Transit service between Denmark and Switzerland commenced in early April.

"U. S. supply, U. N. R. R. A. and coal traffic continued heavy, especially during

the second half of the month," the report points out. "Empty car traffic to the Ruhr area and the Bremen Enclave greatly strained operations and locomotive service, and at some places operations were adversely affected by the high number of foreign bad-order-car trains made up for return to their proper countries.

"Car supply was satisfactory for the occupational forces, but not for civilian traffic," the report continued. "Cars were usually available for inland coal and transshipment freight, but there was a disparity of about 45 per cent between car requirements for other priority goods and the supply. . . . The situation in box cars has been particularly critical, with shortages for civilian traffic constantly over 50 per cent. Unfilled car orders have mounted, mainly because of the steady decrease in the number of cars on hand and delays at terminals."

The report adds that of the 13,278 average number of cars required per work day during April, 7,612 were spotted. Of the 5,899 average number of cars under demurrage per work day, 4,788 were U. S. A., 536 civilian traffic and 575 railway service freight traffic.

A decline in serviceable freight and passenger equipment during April also is indicated in the report. Of 13,405 passenger cars, 5,571 German and 230 foreign units were serviceable, a decrease of 393 cars under the previous month, while a decrease of 3,831 serviceable freight cars also was reported. On the other hand, an increase of 58 serviceable locomotives is noted. Of the 2,719 serviceable locomotives in April, 2,715 were German.

Shop output of locomotives also increased during April, when 388 were repaired, as compared to 377 in the previous month. Decreases of 4.1 per cent and 15.4 per cent occurred in the turnout of freight and passenger cars, respectively.

Manpower Troubles—Turning to denazification of employees, the report claims that although approximately 54 per cent of its employees have been subjected to the denazification program, the Reichsbahn has continued to handle the business offered for movement in a satisfactory manner and "should continue to do so." A total of 194,044 persons were employed as of April 30, an increase of 1,902 over March.

"In March it was necessary temporarily to curtail operations on some of the less important lines, particularly in the eastern districts where the program had the heaviest effect," the report said. "These lines were operated with a reduced force, and the surplus manpower was shifted to the major lines. Men also were reassigned in order to achieve the most efficient use of available manpower, and by the latter part of April, 24-hour service was restored on the more necessary lines, particularly to Czechoslovakia.

"Finding proper men for Reichsbahn work has not been as easy as it would have seemed at the outset. There are too many employees who have no previous knowledge of railroading and consequently are unable to take skilled positions on short notice. The pressure of business upon Reichsbahn officials and older employees makes it difficult for them to devote much time to training new men. Training is being given, but it is hampered badly by lack of facilities for conducting classes. This problem is being overcome, however, and enough capable employees will be trained to take over the openings now existing."

Freight Car Loadings

Carloading figures for the week ended June 29 were not available as this issue went to press.

Loading of revenue freight for the week ended June 22 totaled 858,437 cars, and the summary for that week, as compiled by the Car Service Division, A. A. R., follows:

Revenue Freight Car Loadings

For the Week Ended Saturday, June 22

District	1946	1945	1944
Eastern	166,878	161,179	161,124
Allegheny	180,640	191,405	193,822
Pocahontas	65,005	52,659	54,501
Southern	128,801	124,055	121,083
Northwestern	118,430	133,171	134,947
Central Western	131,293	140,922	139,068
Southwestern	67,390	73,312	75,766
Total Western Districts	317,113	347,405	349,781
Total All Roads	858,437	876,703	880,311
Commodities:			
Grain and grain products	45,328	56,873	53,333
Livestock	12,277	13,522	14,570
Coal	179,629	171,612	174,206
Coke	12,141	13,282	15,036
Forest products	48,680	45,124	47,636
Ore	62,373	74,623	82,088
Merchandise l.c.l.	128,331	106,928	103,811
Miscellaneous	369,678	394,739	389,631
June 22	858,437	876,703	880,311
July 15	867,918	873,522	877,493
June 8	830,126	884,658	873,174
June 1	626,885	837,886	810,698
May 25	571,574	882,753	868,821
Cumulative Total, 25 weeks	18,136,544	20,384,599	20,387,991

In Canada.—Carloadings for the week ended June 22 totaled 71,096 cars as compared with 69,208 cars for the previous week and 74,445 cars for the corresponding week last year, according to the compilation of the Dominion Bureau of Statistics.

Totals for Canada:	Revenue Cars Loaded	Total Cars Rec'd from Connections
June 22, 1946	71,096	36,011
June 23, 1945	74,445	37,345
Cumulative Totals for Canada:		
June 22, 1946	1,662,435	847,203
June 23, 1945	1,699,041	926,178

B. & O. Urges Employees To Get Posted on Its Problems

Explaining that "a recent impartial nationwide survey conducted by outside experts" has disclosed that many railway employees are not well informed concerning the importance of railroad revenue to employment and wages, R. B. White, president of the Baltimore & Ohio, has asked that road's employees to get acquainted with its business and financial situation, if they are not, and to suggest topics about which they may need more adequate and exact information has included with the letter a leaflet entitled, "Do You Know Your B. & O.?"

Six questions are set forth in the B. & O. leaflet, which is so folded that a flap covers the answers, leaving the employee to "guess": (1) How many cents of each dollar of income was paid in wages in 1945; (2) how many cents of each dollar of income remained after expenses to be put back into the property; (3) how many cents of each dollar taken in was paid to stockholders; (4) the proper order, by size of payments, of interest, wages and taxes; (5) the amount invested in the road's physical property for each job (a choice of three amounts, $5,000, $10,000 and $20,000 was offered); and (6) in which year, 1944 or 1945, the road made more money.

Urging employees to write to him for further information about the company's finances, Mr. White pointed out that its business had been adversely affected in 1946 by "serious interruptions to industrial production, competition, and high taxes." "Every interruption in the output of industry reduces business in general and lowers the dollar income of the B. & O.—retards its progress and curtails its ability to provide employment," he continued. "Each additional tax dollar—as well as every taxpayer's dollar spent by the government to enable air, highway and waterway transportation to furnish service without paying the full cost, diverts business from us and cuts into your prosperity."

General Electric to Reopen Lighting Institute

The formal reopening of the General Electric Lighting Institute at Nela Park, Cleveland, Ohio, has been set for the week of August 5. The Institute was closed during the war and an extensive rebuilding program is nearing completion. Elaborate rededication ceremonies will mark the occasion, it was announced.

The Institute, completely rebuilt to serve the present and future needs of the General Electric lamp department, will resume its series of lighting "schools" immediately after the opening week celebrations, and is designed to serve as a source of information on lamps of all kinds for every purpose.

Rock Island Revamp Plan Is Rejected by Court

Revamping of the Chicago, Rock Island & Pacific hit another snag on June 28 when Federal Judge Michael L. Igoe at Chicago rejected the reorganization plan submitted to him and referred it back to the Interstate Commerce Commission. Judge Igoe based his refusal to confirm the plan on the following grounds:

1. The plan does not make adequate provision for fair and equitable treatment for the interest and claims of the holders of the convertible bonds of the railroad. 2. Rejection of the plan by the holders of the convertible bonds was justified. 3. The plan does not conform with the requirements of the Bankruptcy Act in respect to the treatment of these convertible bondholders.

In his summing up of the case Judge Igoe said in part:

"Before proceeding further the court wishes to divert for a moment and point out what has transpired in the interval following the approval of the plan June 15, 1945, by the court, and the present.

"An evergrowing wave of criticism directed against the commission and the district courts for the drastic reductions in capitalization effected by their plans of reorganization finally culminated in Congress giving extensive study to proposed remedies.

"Exhaustive hearings were held by com-

mittees of both houses of Congress . . . culminating in the passage of Senate bill 1523, June 15, 1946, which bill now awaits House consideration.

"It must be remembered, in fairness, that practically all of the major plans of reorganization were worked out by the commission in 1940 or prior thereto. Hence, they do not and cannot reflect the extensive strengthening of cash resources, the important retirement of debt and the very considerable improvement to road and equipment made possible by the huge revenues received during the ensuing years."

K. C. S. Enters Air Line Field

With the filing of a certificate of incorporation in Delaware for a subsidiary company, the Kansas City Southern took the final step toward formation of an air transport subsidiary to be known as Kansas City Southern Skyways, Inc. Actual operation of the new company is expected to begin about July 10.

The Kansas City Southern was the first railroad to seek a certificate to operate as a regularly scheduled air carrier when it filed an application with the Civil Aeronautics Board in May, 1939. The application, denied by the board, covered the route of the railway between Kansas City, Mo., and New Orleans, La. Authority to operate over this route later was granted to Mid-Continent Airlines.

Under the certificate of incorporation, the company is authorized to transport persons or property as a contract or private carrier by air between any points in the United States or its territories, and to and from any other countries, subject to foreign restrictions.

Incorporators of Kansas City Southern Skyways, Inc., are J. M. Prickett, J. R. Brown and J. E. Kimmel, all of Kansas City. Mr. Kimmel, vice-president of the new company, was a pilot in the Royal Canadian Air Force and later a captain in the United States Air Forces.

Charles E. Hill Honored on His Retirement

Charles E. Hill, general safety agent of the New York Central system since November 16, 1922, was the guest of honor June 26 at a luncheon in the Hotel Roosevelt, New York, given by colleagues, officers of many railroads and numerous industrial leaders in the safety movement on the occasion of his retirement.

In his almost 40 years of service on the railroad, with which he started as a district claim agent in 1906, Mr. Hill has become widely known as a pioneer of modern safety practices and methods. According to the tributes that marked the luncheon, he created new forms for the reporting of injuries and from the knowledge gained by these reports fashioned new rules and safe practices, many of which have become standard. He has produced two motion pictures on safety; numerous technical papers and is the author of a book based on a safety theme.

An active member of the National Safety Council, Mr. Hill was chairman of its Steam Railroad Section in 1925-26 and served as vice-president, director and member of its executive committee from 1925 to 1932. He also participated as a member of the Safety Section of the Association of American Railroads, serving as its chairman in 1932-33 and as member of Committee of Direction and Committee on Prevention of Highway Crossing Accidents since 1923. He originated its Committee on Uniformity in Accident Reporting, of which he has been chairman since 1933. He is vice-chairman of the Joint Committee on Grade Crossing protection, A. A R., and during the war served as chairman of War Production Fund to Conserve Manpower—Railroad Committee.

National recognition has been given various units of the New York Central on many occasions through awards made by the National Safety Council and the American Museum of Safety, seven separate Harriman awards having been so made during Mr. Hill's service. The most prized of these was the Harriman Gold Medal for the entire New York Central System for the year 1937, representing the largest exposure ever to qualify for such recognition.

P. R. R. Joins in Frisco-Katy New York-Southwest Runs

Additional through sleeping car service between San Antonio, Tex., and New York, via Dallas, will become effective July 7 through the collaboration of the St. Louis-San Francisco, Missouri-Kansas-Texas and Pennsylvania. This augments the Katy-Frisco's "Texas Special" operation as a through train between San Antonio and New York in conjunction with the New York Central, and between San Antonio and Washington in conjunction with the Baltimore & Ohio, reported last week in these pages.

Sleeping cars will leave San Antonio on the "Texas Special" at 8:45 a. m., arriving in St. Louis the following morning at 8:30 a. m. They will depart for New York at 10:00 a. m. on the Pennsylvania's "American," arriving in New York the following morning at 7:55 a. m. Westbound, the through cars will leave New York daily at 7:50 p. m., on the Pennsylvania's "American," arriving in St. Louis the following afternoon at 3:40 p. m., and will leave St. Louis on the "Texas Special" at 5:30 p. m. to arrive in Dallas at 9:55 a. m., and San Antonio at 5:35 p. m. the next day.

The "American" also will carry through cars in each direction between New York and Tulsa, Okla., and Oklahoma City, operating west of St. Louis in the Frisco's "Meteor."

Carloading Estimates Indicate More Mid-West Business

Carloading estimates for the third quarter of 1946 for the territory of the Mid-West Shippers Advisory Board are up 4.4 per cent as compared to the third quarter loadings of 1945, according to the board's report, which showed that loadings during July, August and September are expected to reach 975,866 as against a total of 934,669 in the third quarter of last year. The greatest increase forecast for an individual commodity is 124.8 per cent on automobiles and trucks, followed by increases of 51 per cent on cement, 25 per cent on fertilizers, 23 per cent on agricultural implements and 15 per cent on gravel, sand and stone, and also on machinery and boilers, brick and clay products, and lime and plaster.

The Mid-West board will hold its next quarterly meeting at Burlington, Iowa, on July 18, with Clark Hungerford, vice-president, operations and maintenance, Association of American Railroads, as the principal speaker. Mr. Hungerford's address will be entitled "The Job That Never Ends."

Rail Labor's Security Bill Delayed in House

Appropriation bills and other matters to which the House leadership accorded preference precluded adherence to the prviously-announcd program under which further consideration was to have been given June 28 to H. R. 1362, the pending Crosser bill embodying the Railway Labor Executives' Association program for liberalizing the Railroad Retirement and Railroad Unemployment Insurance acts. House Majority Leader McCormack announced on June 29 that the bill would be taken up again on July 3, when, he hoped, the House consideration of it might be completed.

As noted in the *Railway Age* of June 29, page 1277, the House has already considered the bill at two sessions—June 10 when the rule covering procedure on the measure was adopted and the general debate got under way, and June 20 when the House rejected the substitute bill reported from the committee on interstate and foreign commerce, thus paving the way for consideration of the original version.

N. P. Opens New Car Repair and Manufacturing Shop

The Northern Pacific has just completed a new car-repair and manufacturing shop at Brainerd, Minn., which was opened formally on June 14, in connection with the celebration of the seventy-fifth anniversary of the founding of that city. Four of the general officers of the railway participated actively in the opening ceremony, namely, Bernard Blum, chief engineer; G. L. Ernstrom, general mechanical superintendent; F. G. Moody, superintendent car department; and F. C. Turner, general storekeeper.

Mr. Blum described the new shop, which consists of a main building more than 800 ft. long, containing a fabrication shop or machine area, 80 ft. by 615 ft., and an erection shop, 100 ft. by 810 ft. An annex, 34 ft. by 300 ft., contains a locker room, a lunch room, two toilets, a first-aid room and office space. Also, there is a warehouse, 100 ft. by 278 ft., and a covered storage shed 196 ft. long. Adjacent to the warehouse is a concrete platform, 120 by 280 ft.

All buildings are supported on concrete foundations while the framing of the shop building is heavy structural steel, and the walls are brick and glass block. Both the fabrication and the erecting bays are equipped with overhead cranes that span the full widths of the respective bays. The crane runway for the fabrication shop extends 280 ft. outside of the building to serve a covered and paved storage space. In addition to the buildings, 3½ miles of new tracks were constructed to serve the new

facilities. The shop was designed to complete 10 modern steel freight cars a day, and, in addition, to handle steel-car repairs for the railroad's Eastern district. The total cost of the construction was $1,799,000.

Mr. Ernstrom described the existing locomotive-repair facilities at Brainerd, and the various functions performed by them, pointing out that about 900 employees are engaged in the locomotive and car shops and that the payroll amounted to $2,396,552 in 1945.

Mr. Moody stated that the present car-department force of 400 men, with a monthly payroll of $96,000, will be increased to 500 men, with a monthly payroll of $125,000, as soon as the shop can be placed in full operation. He also stated that during the remainder of the year it is planned to rebuild 1,500 cars, to make heavy repairs to 700 cars and to make light repairs to 1,800 cars, a total of 4,000 cars, at a total cost of $750,000.

Mr. Turner disclosed that Brainerd is the largest supply point on the system, distributing materials to 25 other stores, amounting to about $9,000,000 annually. It is also the concentration point for scrap of which 34,869 tons was handled in 1945.

Southeastern Lines Speed Passenger Trains

General adjustments of passenger train schedules were made by the major southeastern lines, effective June 30, that, in many instances, resulted in substantial improvements in services to the traveling public. From southern Illinois to Chicago, the Chicago & Eastern Illinois improved the schedule of its "Silent Knight" to shorten running time 1 hr. 15 min.

The "Dixie Limited," operated by this line in cooperation with the Louisville & Nashville; Nashville, Chattanooga & St. Louis; Central of Georgia; and Atlantic Coast Line, has been quickened 1 hr. 45 min. southward from Chicago to Jacksonville, Fla., and 2 hr. 30 min. northbound. Under the new schedule, this train leaves Chicago at 3:45 p.m., instead of 3 p.m., arriving in Atlanta, Ga., at 9:45 a.m., 5 min. later than before, and in Jacksonville at 9 pm., 1 hr. earlier. Northward, the 7:30 a.m. departure from Jacksonville remains unchanged, but departure from Atlanta is at 6:30 p.m., 1 hr. 10 min. earlier, with arrival in Chicago scheduled for 10:55 a.m., instead of 2:15 p.m. The St. Louis connection of this train has been adjusted to leave St. Louis at 3:25 p.m., 40 min. later, while the arrival northbound is set for 11:45 a.m., 35 min. earlier. No schedule changes were made in other Chicago-Florida trains over this route.

The "Dixie Express" of the C. & E. I.-L. & N. also has been speeded 30 min. southbound, while C. & E. I. train No. 8 from Evansville, Ind., to Chicago has been quickened 50 min., leaving Evansville at 12:30 p.m., 10 min. later, and arriving in Chicago at 7:05 p.m., 40 min. earlier.

From Cincinnati, Ohio, to Jacksonville, the "Flamingo" has been speeded one hour by the L. & N., C. of Ga., and A. C. L., leaving Cincinnati at 8:05 p.m, as before, and arriving in Jacksonville at 9 p.m., instead of 10 p.m.

The Southern-Atlanta & West Point-Western of Alabama-L. & N. through New York-New Orleans trains, the "Piedmont Limited" and the "Crescent" were also quickened on that date. Under the new time table, the "Crescent" continues to leave New York, via the Pennsylvania, at 1:50 p.m., and Washington at 6:25 p.m., but it arrives in Atlanta at 8:30 a.m., 35 min. earlier, Mobile, Ala., at 4:40 p.m., and New Orleans at 8:25 p.m., both 55 min. earlier. Northward this train now leaves New Orleans at 11 p.m., 30 min. later, but continues its present 9:15 a.m. second day arrival in New York.

The "Piedmont" is unchanged in its 10 p.m. departure from New York, but arrives in Atlanta at 7 p.m., 30 min. earlier, Montgomery, Ala., at 11 p.m., 35 min. earlier, and New Orleans at 9 a.m., 45 min. earlier. Coaches only are handled from Montgomery to New Orleans, the New York-New Orleans sleeping cars being handled on the "Pan-American" from Montgomery, giving a 7:30 am. arrival in New Orleans, 2 hr. 45 min. earlier than before. Northbound the "Piedmont" leaves New Orleans at 5:15 p.m., instead of 4:45 p.m., arriving in New York at 6:45 a.m. the second day as before. As part of their program to improve service to coach passengers these roads are now operating through coaches between Washington, D. C., and New Orleans in the "Piedmont" and in Southern trains 35 and 40 between Washington and Atlanta, thence in the "Crescent" to and from New Orleans.

Other schedule changes on the Southern include a reduction of 40 min. in the running time of train 35 from Washington to Atlanta, and of 35 min. in the schedule of train 30 northward between these cities. The "Southerner," all-coach streamliner between New Orleans and Washington, was also speeded 15 min., northward at this time.

A. A. R. Directors Discuss Rail Public Relations

Public relations activities of the railroad industry came up for considerable discussion and some criticism at the monthly meeting of the board of directors of the Association of American Railroads which was held in Washington, D. C., on June 28. It was stated after the meeting that the discussion resulted generally in the assembled executives being invited to submit any suggestions they may have for improving the public relations program.

The board's consideration of the matter was an aftermath of the memorandum sent recently to executives of A. A. R. member roads by Holly Stover, president of the Chicago & Eastern Illinois, who was among those present at the meeting. Mr. Stover's views were set forth in the *Railway Age* of June 22, the article, entitled "Railroad Management Faces a Decision—Defense or Appeasement," which appeared on page 1221 of that issue, having been adapted from his memorandum to the executives.

Another matter under discussion was the Interstate Commerce Commission's recent decision authorizing temporary freight rate increases averaging only 6.5 per cent in the Ex Parte 162 case. In that connection the general reaction was reported to have been one of disappointment, but the board moved to expedite the further hearing on the petition for a 25 per cent advance, sending a delegation headed by A. A. R. President J. J. Pelley to call on the Interstate Commerce Commission for the purpose of urging expedition and discussing future procedures in the case. The further hearing is now scheduled to open in Chicago on July 22 before the commission's Division 2.

The board also elected J. D. Farrington, chief executive officer of the Chicago, Rock Island & Pacific, to its membership. Mr. Farrington, who also was appointed to the board's executive committee, succeeds the late L. W. Baldwin of the Missouri Pacific.

Blackmore Prophesies

The next fifty years will be as notable for radical improvements and developments in the field of signaling as have been the past fifty years, at the beginning of which period railway signaling was in an early stage of development. This declaration was made by George A. Blackmore, chairman of the Union Switch & Signal Company, on July 1 in responding to the unveiling in the foyer of the offices of that company in Swissvale, Pa., of a bronze plaque bearing a suitable inscription and his three-quarter bas-relief likeness, commemorating his fifty years of service with that company. It climaxed a review of the achievements of his company and the progress of signaling over the half century.

A. N. Williams, president of the company, presided at the ceremonies and Richard K. Mellon, a member of the board, paid tribute to Mr. Blackmore and his service to the company, both in years and in executive ability. The citation on the plaque reads as follows:

"Respected for his outstanding executive ability and beloved for his warm human qualities, he advanced through positions of increasing responsibility from office boy to President and Chairman of the Board. Through his vision and foresight he has guided the Company to pre-eminence in its field—developing fundamentally new systems of signaling that have made an outstanding contribution to the high levels of safety and efficiency which characterize modern railroad operation."

The ceremony was followed by a reception and buffet dinner given in Mr. Blackmore's honor at the Longue Vue club.

Mr. Blackmore entered the service of the company July 1, 1896, as an office boy at the age of 12. Meanwhile he took a business course in night school. After five years of clerical work and as a stenographer in the office of the general manager, he was appointed chief clerk in the engineering and estimating departments. He continued night courses in mechanical and electrical engineering. In 1904, at the age of 20, he was assigned to the New York office of the company, at the time that the first signal system was being installed in the Interborough Rapid Transit subway system. Five years later, in 1909, he was made assistant eastern manager, and two years later became eastern manager, in charge of the New York, Montreal and Atlanta offices. He returned to Swissvale in 1915, as general sales manager, and was elected second vice-president, in charge of sales and engineering, when the Union Switch & Signal Company was merged with the Westinghouse Air Brake Company in 1917. In 1922 he was promoted to first vice-president and general manager, and in 1925 was elected to the board of directors.

In 1929 he became president and general manager.

In addition to this Union Switch & Signal Company responsibilities, he was elected vice-president and general manager of the Westinghouse Air Brake Company in 1932. In 1936 he was elected president and director of that company, and in 1940 was elected chairman of the board and president of both companies. Since April 16, 1946, he has held the position of chairman and chief executive officer of both companies.

Smoke Prevention Meeting

The 39th Annual Meeting of the Smoke Prevention Association of America was held at the Hotel Nicollet, Minneapolis, Minn., June 23-26, and was characterized by the relatively large number of railroad representatives in attendance; the Railroad Smoke Association of Hudson county, N. J., was particularly well represented. The Tuesday afternoon and Wednesday morning sessions were in charge of the Railroad Committee, Eugene D. Benton, until recently with the Louisville & Nashville, but now research engineer of the Fuels Division of the Battelle Memorial Institute, presiding.

The program for these two sessions included addresses on Railroad Smoke Abatement by Roy V. Wright, managing editor of the *Railway Age*; Automatic Controls for Locomotive Overfire Air Jets, by John Canetta, Westinghouse Air Brake Company; Railroad Motive Power Trends, by Ralph P. Johnson, chief engineer, Baldwin Locomotive Works; and the Supply of Air to Coal-Fired Steam Locomotives, by Ralph A. Sherman, supervisor, Fuels Division, Battelle Memorial Institute. Abstracts of these addresses will appear in next week's issue of the *Railway Age*. There was also a demonstration of locomotives equipped with overfire steam air jets at nearby station of the Chicago, Milwaukee, St. Paul & Pacific.

The convention was presided over by its president, Ernest J. Brundage, chief smoke inspector, Rochester, N. Y. In addition to a report from the Combustion Equipment Standardization Committee, other addresses included: Importance of Smoke Abatement in City Planning, by Herman Olson, planning engineer, City Planning Commission of Minneapolis, Minn.; Dust and Its Relation to Smoke, by Sumner B. Ely, superintendent, Bureau of Smoke Regulation, Pittsburgh, Pa.; Problems of Atmospheric Pollution as Related to Weather Conditions, by S. Fritz, United States Weather Bureau, Washington, D. C.; The Stoker Industry and Smoke Abatement Activities, by Lloyd L. Connell, technical director, Stoker Manufacturers Association, Chicago; Teaching People to Burn Fuels Smokelessly and Economically, by Ben. G. Elliott, Department of Mechanical Engineering, University of Wisconsin; Correcting Smoke with Automatic Controls, by Gerald S. Bataille, general manager, Campbell Engineering Company, Appleton, Wis.; Effect of Smoke Abatement Surveys Conducted in Various Cities, by H. B. Lammers, director of engineering, Coal Producers Committee, Cincinnati, Ohio; and Practices in Smoke Abatement and Fuel Technology, by Harold J. Rose, director of research, Bituminous Coal Research, Pittsburgh, Pa.

The newly elected officers are: president, Sumner B. Ely, superintendent, Bureau of Smoke Regulation, Pittsburgh; first vice-president, Eugene D. Benton, research engineer, Fuels Division, Battelle Memorial Institute, Columbus, Ohio; second vice-president, C. J. Sokel, chief clerk, mechanical department, Belt Railway Company of Chicago; secretary, Frank A. Chambers, deputy smoke inspector, Chicago, Ill.; sergeant-at-arms, G. C. Hess, road foreman of engines, Pennsylvania Railroad, Jersey City, N. J. A new office was created and W. E. E. Koepler, secretary, Pocahontas Operators' Association, Bluefield, W. Va., was elected director of public relations. The 1947 convention will be held at Toronto, Canada.

T.P.&W. Interchange Traffic Embargoed by Connections

With the placement, on June 26, by the Pennsylvania and the Wabash of embargoes against all traffic for movement to, from or via the Toledo, Peoria & Western, that road is now completely isolated from interchange traffic with connecting lines. Since resumption of train operation on the Eastern division of the strike-bound carrier on June 3 (*Railway Age*, June 8), each of the other lines connecting with that portion of the T. P. & W. has issued embargoes to prohibit interchange of traffic with the road because of "inability to effect interchange with the T. P. & W. in the normal manner." The road has made no attempt to operate its Western division and has its own embargo covering traffic on that section of the line outstanding.

Representation of Employees

The American Railway Supervisors Association, Inc., has replaced the Association of Supervisors, Southern Pacific Company, Pacific Lines, as representative of mechanical department foremen and supervisors employed by the Southern Pacific and the Brotherhood of Railroad Trainmen has been certified as bargaining agent for passenger representatives employed by the Southern, who formerly were without representation, according to results of recent elections which have been certified by the National Mediation Board.

In other elections in which representation rights were retained, the Switchmen's Union of North America, defeating the B. of R. T., 330 to 222, continues to represent yardmen, including foremen and helpers, employed by the Pere Marquette; and the Association of Shop Craft Employees of the Southern Pacific Lines in Texas and Louisiana, by virtue of an 88 to 55 victory over the International Brotherhood of Blacksmiths, Drop Forgers and Helpers, operating through the Railway Employees' Department, American Federation of Labor, remains as the bargaining agent for blacksmiths, including helpers and apprentices, employed by the Texas & New Orleans.

The board has also certified the International Association of Machinists, which also operates through the Railway Employees' Department, A. F. of L., as representative of motor car repairmen employed by the Western Pacific for the purposes of the Railway Labor Act. This certification was made on the basis of a mediator's investigation and check of representation authorizations, the employees having previously been unrepresented. Not-

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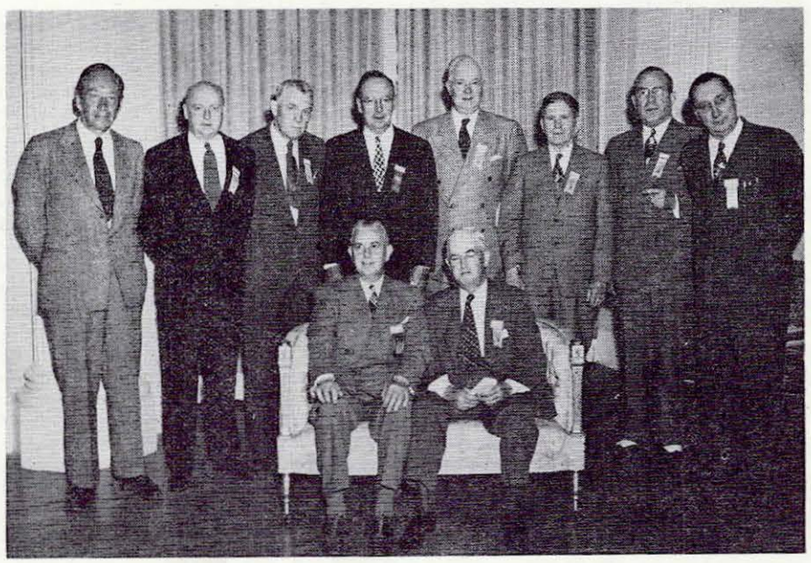
Accounting Leaders at Annual Meeting



This photograph was taken at Bretton Woods, N. H., on June 20 by George H. Hill, B. & M. official photographer. Herbert L. Baldwin, publicity manager for the B. & M. and Me C., with Mr. Hill and Mrs. Mary G. O'Rorke, secretary in the department, set up publicity facilities at Bretton Woods which operated throughout the convention, resulting in widespread reports on the meeting and addresses in New England newspapers.

Standing, left to right: T. H. Cooper (v.-p., C. N. R.), E. A. Leslie (v.-p., C. P. R.), E. H. Bunnell (v.-p., A. A. R), G T. Carmichael (v.-p., N. Y. N. H. & H.), W. C. Carrick (gen. aud., R. F. & P.), J. J. Ekin (retired v.-p., B. & O.), T. J. Tobin (comptroller, Erie), I. V. Jessee (comptroller, N. & W.). Seated: G. F. Glacy (comptroller, B. & M.), L. J. Tracy (controller, U. P.).

ing that they have been carried on the payroll of the road's maintenance of way department, the board said that the certification "does not establish a precedent or preclude an ultimate determination in any future dispute as to the proper classification of these employees for representation purposes."

"City of Denver" Celebrates Tenth Anniversary

On June 18, the tenth anniversary of their inauguration, the two "City of Denver" trains completed 7,398,224 miles of operation, or the equivalent of 297 trips around the world. On June 25, a celebration of the first decade of these C. & N. W. - U. P. streamliners was held by the Chamber of Commerce in Denver. Governor John C. Vivian, of Colorado, presented scrolls to G. F. Ashby, president, Union Pacific; Carl R. Gray, Jr., vice-president, C. & N. W., Champ Carry, president, Pullman-Standard Car Manufacturing Company; C. R. Osborn, vice-president, General Motors; Thomas C. Jones of the Aluminum Company of America; and to Conductors Charles McIntire and Clarence J. Burley, commemorating the occasion.

During the 66 months of peace-time operation of these trains, they carried 467,178 passengers, while during the 54 months of war-time operation, they transported 562,636 passengers. Started originally as 12-car trains, powered by two-unit, 2,400-hp. locomotives, these streamliners were increased to 14-car trains in May, 1939, with three-unit, 3,600-hp. locomotives. The war-time schedules were lengthened one hour, but, effective June 2, 1946, the trains were restored to their original schedule of 15 hr. 35 min. eastbound and 16 hr. westbound.

At a luncheon given by the Chamber of Commerce, the speakers were Messrs. Ashby, Gray, Carry and Osborn. Mr. Osborn spoke as follows:

"When the Union Pacific and the North Western ordered the 'City of Denver' train they took an awful lot for granted. It is true that the best engineering talent available at that time was given the job of designing the train but these men were entering a new field, regarding which little was known. No one knew whether engineering advancement and new manufacturing technique would obsolete the design or so reduce its manufacturing costs as to wipe out the major part of the owners' equity in their original investment. Yet the railroad officials went ahead with their plans. And we in General Motors, having complete confidence in the vitality and soundness of this new development, erected a small locomotive manufacturing plant in LaGrange, Ill. This first investment of ours supplied 60,000 sq. ft. in buildings and employed about 300 people.

"The 'City of Denver' and other trains of like design created public interest in this new advanced method of transportation, and profit for its owners, far beyond all of our expectations. The 'City of Denver' train, which you christened here 10 years ago, was a forerunner of tremendous growth in Diesel motive power throughout all American railroads. The new development grew by leaps and bounds. In Denver alone, if you follow the lure of the railroads—as every boy from 5 to 80 does—you would find that 9 trains pulled by Diesels enter and leave your station every day; that 42 Diesel-powered trains enter and leave Chicago every day; that 18 Diesel-powered trains enter and leave Washington every day; that Diesel-powered passenger trains arrive or depart every day from St. Paul, Minneapolis, Seattle, Los Angeles, El Paso, New Orleans, Miami, New York, Boston, Buffalo, Detroit, St. Louis, and all the intervening cities.

"There are some 200 outstanding trains in America powered by Diesel locomotives. These trains travel more than 110,000 scheduled miles every day. In these days when we marvel that some of our automobiles, even with frequent trips to the service stations, have run 100,000 miles, you would find by contrast that some of these early trail blazers have run over three million miles, others two million miles, and a number have exceeded one million miles, some of them without ever having missed a scheduled run in their entire life.

"And now what has happened to the little 60,000 sq. ft. plant which we erected in 1936? It has grown to 1,600,000 sq. ft. and shortly will have 2,200,000 sq. ft. in full productivity. Likewise, the handful of 300 men has now grown to 9,000 and shortly will be 11,000 to 12,000. Consequently, when we first saw the 'City of Denver' move into your terminal, few of us realized that we were witnessing a major industrial development in our country, that we were participating in the growth of a new industry. The courage of Mr. Ashby and his associates, the executives of the other railroads, and General Motors has been fully justified.

"The railroads and we are also mindful of a very important second phase of our development which is about to occur on many of the railroads throughout the United States—some railroads are now approaching complete Dieselization of their properties. With Dieselization, important secondary savings can be realized through the elimination of coaling and watering stations, ash handling facilities, back shops and the like. These secondary savings will contribute very importantly to the financial results of the railroads."

Mr. Ashby informed the audience that the Union Pacific was ready to continue its role as one of the leaders in passenger progress among the railways of the country. He pointed out, however, that this would not be possible unless the railways were given the increased freight rates they were asking for to offset the increased wage and material costs with which they are now faced. Mr. Ashby added that in 10 years the "City of Denver" trains have produced 20 years' service and the history of passenger progress has progressed 100 years.

General Gray outlined passenger progress in Europe and pointed out that most of the high speed service there is handled by 1, 2 or 3-car units of electric, steam or Diesel rail cars on frequent schedules. He pointed out, however, that in Europe, even before the war, there was no passenger service comparable to the fleet of long-distance streamlined Diesel trains and attributed this to the fact that the railways of Europe are government-owned and that the competition and initiative of private railway operation was lacking.

Mr. Carry paid tribute to the farsightedness of the managements of the Union Pacific and the Chicago & North Western in launching streamlined service and in taking the responsibility of the heavy investment when there were, as yet, no results to use as a criterion. He also outlined the car builders' problems in producing trains of such revolutionary design.

May Truck Traffic

Motor carriers reporting to American Trucking Associations transported in May 1,818,532 tons of freight, an increase of 4.5 per cent over the 1,740,000 tons transported in April and an increase of 5.2 per cent over the May, 1945, total of 1,728,894 tons. The A.T.A. index figure based on the 1938-40 average monthly tonnage of the reporting carriers, was 187.6 for May.

The foregoing figures, according to the A.T.A. statement, are based on comparable returns received from 196 truckers in 36 states. Carriers in the Eastern district reported tonnage increases of 3.5 per cent above April and 4.5 per cent above May, 1945. In the Southern region the respective increases were 14.7 per cent and 11.8 per cent. Tonnage in the Western district was up 3.9 per cent from April and 4.8 per cent above May, 1945.

New York Express Embargoed in "Work Stoppage"

The Railway Express Agency on June 27 placed an embargo on all rail and air express traffic into and out of the New York metropolitan area, following a "work stoppage" of employees in that area who are members of the Brotherhood of Railway & Steamship Clerks. According to J. F. Ross, general manager of the R. E. A. New York City department, the "stoppage" was not authorized by the national officers of the brotherhood.

Following an "understanding" with representatives of these employees, they returned to work July 2. The embargo was not immediately lifted, however, because terminals were congested and "thousands of shipments must be delivered and forwarded" before normal operations could be resumed.

"Pacemaker" Freights Make Their First Run

The New York Central on July 2 inaugurated its fast overnight merchandise freight, the "Pacemaker," operating in each direction between New York and Buffalo, with stops at Albany, Utica, Syracuse and Rochester. The schedule permits departure from New York at 8:15 p. m. and arrival at Buffalo before 7 a. m. the following morning, with connections at that point for Cleveland, Cincinnati, Detroit and other cities. Eastbound, the train leaves Buffalo at 6:40 p. m., arriving at New York in the early morning.

The specially-painted high speed equipment assigned to this service was described in *Railway Age* of June 29, page 1265.

A list of current publications appears on page 37.

With the Government Agencies

Limits on Rail Trucks Don't Extend to Buses

Rock Island case rule applies only to highway freight services, I. C. C. says

Conditions which the Interstate Commerce Commission has been attaching to certificates authorizing railroad-controlled trucking operations in order to insure that they remain auxiliary to train services are not intended to apply to railroad bus operations, the commissions Division 4 has announced in a recent decision approving the purchase by the Gulf Transport Company, subsidiary of the Gulf, Mobile & Ohio, of the Clayton Tinsley Bus Lines' operating rights on a 40.8-mile route between Meridian, Miss., and Butler. The decision also authorizes the G. M. & O. to acquire control of the rights thus to be purchased for $35,000 by its affiliate which has operated the route under lease since December 13, 1945.

The request for application of the truck-certificate conditions was made by Southern Bus Lines, Inc., that protestant citing the commission's recent report in the Rock Island Motor Transit Company case (No. MC-F-445) which said that "the accomplishment of the purposes forming the national transportation policy require that, except where unusual circumstances prevail, every grant to a railroad or to a railroad affiliate of authority to operate as a common carrier by motor vehicle or to acquire such authority by purchase or otherwise should be so conditioned as definitely to limit the future service by motor vehicle to that which is auxiliary to, or supplemental of, train service." This Rock Island decision, which was followed by the filing of the applicant's still-pending petition for reconsideration, was reported in the *Railway Age* of March 23, page 650.

No Precedent—"A careful reading of the report in the *Rock Island case*," said the commission in its present decision, "shows that the discussion therein concerned only the transportation of freight by motor vehicle under railroad control, and was not concerned with such transportation of passengers. The finding that motor truck operations under railroad control should be limited to that which is 'auxiliary to, or supplemental of, train service' was intended to apply to the transportation of freight. What, if any, limitation should be applied to the transportation of passengers was not considered.

"The reasoning in support of the finding that motor truck operations should be so restricted is not applicable to motor bus service. Competitive and other conditions in the motor bus industry are wholly different from those in the motor truck industry, and the need for such limitations on rail-controlled motor bus operations has not here been shown. Such a limitation on motor bus operations has not been imposed in any case arising under former section 213, present section 5, or section 207, except when request for such limitation has been made by the applicant.

"The general policy has been, in such cases, to inquire whether the acquisition or extension is an invasion of territory outside the natural territory of the railroad, although numerous exceptions to limiting the operations to such territory have been made. Such an exception to that general policy is warranted here, and application of the proviso of section 5(2) to the instant transaction requires only that the evidence establish that the transaction will be consistent with the public interest, that the parent railroad will be able to use the motor bus operation acquired to public advantage in connection with its rail operations, and that the transaction will not unduly restrain competition. Those findings are warranted by the evidence in this record."

Complements Train Service—In the latter connection, the report had previously noted that while Meridian is the only point on the Tinsley route which also is served by the G. M. & O., the bus route nevertheless "is entirely complementary to Transport's present motor bus operations and bridges a gap between its St. Louis-Philadelphia-Meridian route and the York-Butler-Mobile route."

With respect to Southern Bus Lines' complaint that the acquisition would enhance the "dominant position" already held in the territory by Transport and the G. M. & O., the commission observed that the protestant "is by no means a small carrier, having total assets, as of November 30, 1945, of more than $8,000,000 and an earned surplus, as of the same date, of $2,319,972." Another allegation of Southern was that the management of Transport and the railroad is affiliated with All American Bus Line, Inc., "through blood relationship" and that the proposed acquisition is "part of a plan to 'blanket' existing independent motor carriers under rail-dominated motor carriers."

The commission found that evidence tending to support this contention was "meager," revealing only that the president of Transport and the railroad, I. B. Tygrett, is an uncle of John Burton Tygrett, the executive vice-president of All American, and that Transport and All American have an arrangement for interchange of passengers at St. Louis. "There is," the commission went on, "nothing to indicate that the latter arrangement differs from those which Transport has with other connecting carriers. The record will not support a finding that Transport and All American are controlled or managed in a common interest, or that the instant transaction is part of a plan to dominate independent motor bus carriers."

Seaboard Revamp Plan Gets I.C.C. Clearance

Approved acquisitions and financing prepare way for end of receivership

Acquisitions and financing whereby the newly-organized Seaboard Air Line Railroad Company will take over the properties of the Seaboard Air Line Railway Company under the reorganization plan terminating the 15½-year receivership of the latter were approved by the Interstate Commerce Commission, Division 4, in a June 28 report. The report in Finance Docket No. 14500, Seaboard Air Line Railway Company Receivership, embraces also Finance Dockets Nos. 14501 and 14501 (Sub. No. 1), Seaboard Air Line Railroad Company Acquisition, etc.

As the present report points out, the commission's prior report of August 12, 1944 (noted in the *Railway Age* of August 19, 1944, page 323) had tentatively approved the capitalization of the reorganized company as set forth in the plan of reorganization, but no order was then issued "because of the preliminary character of the application." Under the plan the old preferred and common stock will be wiped out, and no provision is made for holders of present adjustment bonds and unsecured claims not entitled to priority.

Employees Safeguarded—The present order authorizes purchase by the Railroad Company of the railroad properties and other assets of the Railway Company or its receivers, or both; operation of such railroads, including those operated under contract, lease or agreement; and the acquisition of control, or joint control, through ownership of capital stock of certain other railroad companies and joint control of the Baltimore Steam Packet Company. In approving these acquisitions the commission attached labor-protection provisions as set forth in the Interstate Commerce Act's section 5(2), thus adhering to the uniform policy recently announced even though it did not appear that any railroad employee would be adversely affected.

With respect to the Baltimore Steam Packet Company, the old company's 50 per cent interest in that water line had been held pursuant to an authorization received from the commission under the Panama Canal Act; and the present order includes provisions which have the effect of transferring that authorization to the new company. The remaining 50 per cent of the Packet Company's stock is owned by the Chesapeake Steamship Company, the capital stock of which is owned by the Southern and the Atlantic Coast Line.

The railroad properties to be acquired by the new company were subject, in whole

or in part, to 18 separate mortgages securing outstanding bonds. The reorganization plan, as the commission said, "contemplates a single new system subject to new consolidated system mortgages and the elimination of all prior liens." The new company's capitalization will consist of $98,987,000 of long term debt and $100,000,000 of stock. The long-term debt will include $13,987,000 of receivers' equipment trust certificates which will be taken over; $32,500,000 of first-mortgage, 50-year, 4 per cent bonds, series A; and $52,500,000 of income-mortgage, 70-year, 4½ per cent bonds, series A. The stock will include $15,000,000 of 5 per cent preferred, series A, and 850,000 shares of no-par common, the stated value of which will be $100 a share.

The commission's order authorizes the foregoing issues, and permits also the issuance of such additional common (not exceeding 675,000 shares) as may be necessary to comply with the conversion rights of the income-mortgage bonds and the preferred stock. It further authorizes assumption of liability for the receivers' equipment trust certificates, mentioned above. Also the new company is authorized to assume other liabilities of the old company or its receivers, or both, as follows:

As guarantors or lessees, or both, in respect of $323,333 of first-mortgage, 4 per cent bonds of the Birmingham Terminal Company; $100,000 of first and general mortgage, 5 per cent bonds, $2,400,000 of refunding and extension mortgage, 5 per cent bonds, series A, $1,100,000 of refunding and extension mortgage, 6 per cent bonds, series B, and $400,000 of refunding and extension mortgage, 4½ per cent bonds, series C, all of the Jacksonville Terminal Company; $280,000 of 1½ per cent serial promissory notes of the Norfolk & Portsmouth Belt Line; and $200,000 of first mortgage, 4 per cent bonds of the Tampa Union Station Company. As lessee by lease or operating agreement, insofar as rental payments are involved, in respect of Athens Terminal Company first mortgage, 5 per cent bonds, $200,000; Birmingham Terminal Company, 1,500 shares of capital stock; Durham Union Station Company, 333 shares of capital stock and $60,000 of first mortgage, 5 per cent bonds; North Charleston Terminal Company, 1,050 shares of capital stock; Savannah Union Station Company, $600,000 of first mortgage, 4 per cent bonds; Tampa Union Station Company, 300 shares of capital stock; Atlanta Terminal Company, $1,600,000 of first mortgage, 4 per cent bonds, and 1,500 shares of capital stock.

The present report does not discuss the earnings outlook and prospects for coverage of charges by the reorganized company, its reference to those matters being a citation of discussions in the August 12, 1944, report. As noted in the August 19, 1944, issue's review of that report, the commission there found that the new company's estimate that future annual earnings, under normal conditions, should average $7,498,000 was well supported.

Voting Trust Set Up—While there have since been some changes, including an increase in the outstanding receivers' equipment trust certificates to be assumed, the prior report put the new company's fixed annual charges at $1,746,000, including the $1,300,000 first mortgage bond interest. Annual contingent charges were put at $2,625,000, including $2,362,500 interest on the income-mortgage bonds. The total charges before preferred dividends were put at $6,321,000. Allowing $750,000 for preferred dividends, aggregate charges before common dividends would be $7,071,000.

Other determinations of the commission's present report give conditional approval to the voting-trust feature of the reorganization plan; and find that the requirements of the constitution and statutes of South Carolina in respect to railroads operating within that state impose a burden on interstate commerce insofar as they require separate incorporation within that state.

Under the voting trust agreement, the five voting trustees will be L. R. Powell, Jr., and H. W. Anderson, the old company's receivers, and Joseph France, Otis A. Glazebrook, Jr., and Sam H. Husbands. Under the plan, the voting trust was to continue until April 1, 1951, with provisions for extension. The condition which the commission attached to its approval stipulated that the trust "shall not continue in effect after April 1, 1951, except upon our authorization herein, and that no other voting trust shall be created to control the common stock of the new company unless and until so authorized by us in an appropriate proceeding held for that purpose." Previously the commission had added some critical comment to its reference to the fact that the "primary purposes of the voting trust are perpetuation of the management and protection of the bondholders."

"Among the more important railroad competitors in the territory served by the new company," it said, "are the Atlantic Coast Line and the Southern Railway systems, neither of which has been in receivership or bankruptcy during the past 20 years, whereas the Seaboard Air Line Railway Company has been in the hands of receivers for the past 15½ years and unable to reorganize until it received the benefit of the greatly increased earnings resulting from the recent war. We are not persuaded that these facts furnish unqualified support for continuing the management. Furthermore, as the property is to be taken over by the bondholders of the old company who will receive stock, bonds and cash of the new company for their former holdings, it is somewhat difficult for us to perceive the necessity for the bondholders to be protected against themselves as stockholders."

The report did concede, however, that under the proposed set-up, the bondholders "could sell their voting-trust certificates and scrip, secure in the fact that control of the new company for a time at least would be vested in the voting trustees and the property operated for their express protection." The commission also made some observations on the expenses of the reorganization for which the court had set aside a fund of $10,000,000.

Fees Are Questioned—"In authorizing the issue of the new securities and the assumption of obligations as proposed," it said, "we are concerned not only that the securities will be fully supported by tangible property, that the earnings will be as nearly as can be determined sufficient to service the securities and that the terms of the securities are in conformity with modern and sound financial practices, but we are also vitally concerned with the total amount of cash to be received by the new company in connection with the purchase of the properties including its working capital, to the end that the stability of the new company may be reasonably assured at its inception. As has been stated above, claims for allowances and expenses, excluding claims of receivers and their counsel, have been filed in the total amount of $3,007,624.17, while the claims of receivers, their counsel, and chief accounting officer amount to $1,443,170, making a total of $4,450,794.17. The receivers, their counsel and chief accounting officer were paid to December 31, 1945, as compensation a total of $1,863,205.

"From the facts known to us, we regard claims for any such amount as $4,450,794.17 excessive and unjustified. As has also been indicated, the Virginia court has assumed jurisdiction over the approval of these claims and has appointed a special master to report thereon. We must assume that the court when approving and authorizing the payment of these claims will consider fully the merits of each of them and will limit payments to such amounts as it finds just and reasonable so that a major portion of the $10,000,000 set aside for expenses may be paid to the new company to be used for its corporate purposes."

$116 Million Short—An appendix to the report shows a tentative constructed balance sheet as of December 31, 1945, giving effect to the acquisition by the new company of the properties involved in the plan. The total assets are shown as $233,509,697, including a figure of $142,398,286 for investment in transportation property, less the acquisition adjustment and recorded depreciation. Total current assets are shown at $51,712,810, including $8,644,997 in cash and $14,007,587 in temporary cash investments, compared with total current liabilities of $23,129,102. The $8,644,997 shown in the cash account does not include any part of the $10,000,000 set aside for expenses of the reorganization, or of another fund of $9,334,300 which is to be distributed to creditors under a court order of December 27, 1945.

Another compilation shows that security holders of the old company who qualified for participation in the plan filed total principal and interest claims, as adjusted

C. P. A. Extends Immunity Certificate to October 1

Administrator J. D. Small of the Civilian Production Administration has further advanced from July 1 to October 1 the expiration date of Certificate No. 44, whcih was issued in March, 1943, by the chairman of the former War Production Board to give carrier rate bureaus and other joint-action arrangements wartime immunity from the anti-trust laws.

to March 31, 1946, in the amount of $323,905,278; and that they received under the plan's allocation scheme cash (the aforementioned $9,334,300) and new-company securities in the aggregate amount of $194,334,300, taking the new common stock at $100 per share. Thus the amount by which the allocations failed to meet the claims was shown as $115,982,978. Of the 850,000 shares of new common stock, 665,399¾ shares goes to holders of five issues of the old company's general mortgage bonds and collateral trust notes.

Investigation of Bus Operations Asked by H. & M.

Asserting that the "present state of chaotic and unbridled cutthroat competition" cannot be cured by "piecemeal consideration of individual cases," the Hudson & Manhattan has asked the Interstate Commerce Commission to institute an investigation into the operational practices of motor bus carriers between New York and the New York-New Jersey short-haul mass transportation area. The petition was filed in support of a similar petition submitted by the Westwood Transportration Company on April 9.

The H. & M. petition specifically called for an investigation of alleged unlawful practices by the bus carriers in connection with (1) the issuance of grandfather certificates, (2) segmentation of separately certificated routes and (3) the description in applications and certificates of routes and termini, including extensions of existing routes.

O. D. T.'s King Calls for Drive on Car Repairs

Deputy Director Homer C. King of the Office of Defense Transportation has called upon the railroads to turn every effor toward reducing bad order cars to a minimum. The call went out in June, 27 letters to J. J. Pelley, president of the Association of American Railroads, and J. M. Hood, president of the American Short Line Railroad Association, who were assured that the railroads would receive O.D.T. backing in their efforts to obtain any repair materials in short supply.

"The continuing increase in the number of railroad cars awaiting repair as noted from information reaching us impels me to repeat our insistence that the railroads turn every effort towards reducing bad orders to a minimum," Mr. King said. "Reports coming to us now of serious shortages of box, refrigerator and hopper cars raise grave doubts as to the ability of the railroads to meet fully the rapidly growing demands of domestic production and the famine food export program.

"Colonel Johnson has handled with you separately the question of the railroads ordering additional new cars and I know that you are giving that problem immediate consideration. New cars must be obtained as quickly as possible, both to increase ownership and to replace equipment which must be retired but new car production cannot solve the present car supply dilemma. It is obvious that the major relief must come once again through more prompt repair of existing equipment. The railroads should strive to reduce the percentage of cars awaiting repair from the present figure of 4.9 per cent to the war time record when for many months it was below 3 per cent.

"I am writing, therefore, to request you to urge the railroads in the strongest possible terms to devote the energies and expenditures necessary to reduce the bad order figures to war time levels. I am aware that material shortages have been very harmful in delaying car repairs and we have been working towards adjustment of car lumber prices to remedy what appears to be the most serious part of the difficulties. We have achieved some success in this respect on Douglas fir prices and we expect adjustment of Southern pine car lumber prices within the week.

"In reference to steel shortages, we have received definite assurance from C.P.A. of their readiness to give assistance in any hardship cases which we bring to their attention. If material shortages are at the bottom of the increases in bad order cars we believe that we can rgive direct help in expediting the movement of the bottleneck items. The carriers should be encouraged to bring such problems to our attention."

I. C. C. Gets Complaint in L. & N. "Jim Crow" Case

Two negroes who are plaintiffs in a $50,000 damage suit against the Louisville & Nashville have made the alleged incident on which the suit is grounded the basis also for a complaint to the Interstate Commerce Commission, charging that road with violations of the Interstate Commerce Act. The complainants are James E. Stamps of Chicago and Ennis L. Powell of Charleston, W. Va.

As noted in the *Railway Age* of June 22, page 1227, where the filing of the suit on their behalf was reported, they allege that they were ejected from a table outside the curtained section allocated to negroes in a dining car of an L. & N. train on which they were traveling with first-class accommodations (a drawing room) between Nashville, Tenn., and Cincinnati on March 17.

American Barge Line Awarded "Grandfather" Certificate

The Interstate Commerce Commission, Division 4, has granted a certificate under the "grandfather" clause of the Interstate Commerce Act's Part III to the American Barge Line Company, authorizing continuance of operations as a common carrier by water in the performance of general towage, and by non-self-propelled vessels with the use of separate towing vessels in the transportation of commodities generally between ports and points along the Ohio river and Illinois waterway and along specified parts of the Monongahela, Allegheny, Kanawha, Cumberland and Mississippi rivers. The report is in No. W-552.

Chartering operations whereby American leases vessels to shippers for the transportation of their own property and to other carriers were found by the commission to be common carriage, "directly competitive" with the common-carrier service covered by the certificate authorized. The holding of a permit covering the chartering while the applicant also holds the authorized certificate, the report went on, "would not be consistent with the public interest and the national transportation policy."

Other findings dismissed the "grandfather" clause application to the extent that it covered operations previously authorized under the Inland Waterways Corporation Act between points on the Monongahela, Ohio, and Mississippi; and assigned for hearing "at a time and place to be hereafter fixed" that portion relating to claimed rights on the upper Mississippi.

New Rules Governing Refunds Proposed by Pullman

Regulations designed to supplant wartime restrictions which have been in effect since 1942 and to govern refunds on unused sleeping car tickets are included in a proposed tariff which has been filed with the Interstate Commerce Commission by the Pullman Company. The proposed rules, which Pullman seeks to make effective August 1, are expected to result in a more orderly distribution of sleeping car accommodations. They are the result of a study by Pullman and conferences with railroad executives.

They provide that railroad ticket agents may refund the full amount paid for a sleeping car ticket only if the space covered by the ticket is released not later than the day preceding departure of the car for which it is sold. When space is released later than the day before departure or after departure of the train, or not released at all, the amount of the refund under the proposed regulations will depend upon the resale of the particular accommodation either by the agents or the conductor. However, refund on tickets covering such space will be made only by sending the tickets to the main office of the Pullman Company in Chicago.

Car Service Orders

Various Interstate Commerce Commission service orders which had been scheduled to expire June 30 were amended last week by the commission to extend the expiration dates to October 31. The orders with the extending amendment shown in parenthesis are:

Service Order No. 354 (Amendment No. 3) directing connections of the Toledo, Peoria & Western to reroute trraffic which cannot be handled by that strike-bound road; Service Order No. 340 (Amendment No. 2) which provides minimum weights for westbound carload freight transferred by railroads at transfer points west of the Mississippi river; Service Order No. 381 (Amendment No. 2) which requires prompt forwarding from Mobile, Ala., of cars comprising trainload shipments of bauxite ore; Service Order No. 454 (Amendment No. 1) which provides preference in car supply and in delivery at ports for foreign relief foodstuffs; and Service Order No. 461 (Amendment No. 1) which requires the Salt Lake & Utah to allow joint use of its terminals by the Bamberger, Denver & Rio Grande Western and Union Pacific.

Amendment No. 1 to Service Order No. 523 became effective June 28, amplifying that order's provisions for the protection of through routes and joint rates formerly

applicable via junctions closed as a result of court orders authorizing receivers of the Pittsburg, Shawmut & Northern to suspend operations and embargo traffic over portions of that road's line north of Bolivar, N. Y., and south of Hyde, Pa.

N. Y. Failed to Get Ex Parte 162 Tariffs Suspended

Turning down a telegraphed request from New York State's attorney general, Nathaniel L. Goldstein, the Interstate Commerce Commission on June 28 voted not to suspend the tariffs which the railroads filed on that day to make effective on July 1 the temporary freight rate increases averaging 6.5 per cent authorized by the commission in its June 20 report in Ex Parte 162. Also turned down was Mr. Goldstein's other request for an interpretation of the Ex Parte 162 order in its relation to the additional 5 per cent increase authorized in Official Classification territory.

Mr. Goldstein had thought that one of the ordering paragraphs, which stipulated that the present findings did not supersede or modify the commission's order in the No. 28300 investigation of the class rate structure, indicated that the commission might not have intended to superimpose the additional 5 per cent in the East. He also suggested that some violation of the injunction staying the No. 28300 order might be involved.

The docket shows that this part of the New York attorney general's wire was answered in abrupt fashion by the commission's chief counsel, Daniel W. Knowlton, whose July 1 wire to Mr. Goldstein read as follows: "Answering your telegram to Chairman Barnard with respect to clarification of the Interstate Commerce Commission's order in Ex Parte 162, I am instructed to advise that the order appears to have been correctly understood by the railroads and others and it is believed that it is clear and speaks for itself."

The New York attorney general received advice of the commission's refusal to suspend the tariffs in a brief wire from I. C. C. Secretary W. P. Bartel.

Sets Additional Ex Parte 162 Hearing Dates

Dates and places have been set by the Interstate Commerce Commission for additional sessions to follow Chicago's July 22 opening of hearings on those phases of the railroads' Ex Parte 162 petition which seek to establish the proposed 25 per cent increase in freight rates on a permanent basis and to continue present passenger fares without expiration date. The commission's decision granting freight rate increases averaging 6.5 per cent pending the further hearing was reported in the *Railway Age* of June 29, page 1262.

The now-announced hearings following the Chicago sessions will be held August 5 at the Statler hotel, Buffalo, N. Y.; August 8 at the Atlanta Biltmore hotel, Atlanta, Ga.; and August 12 at the Galvez hotel, Galveston, Tex., and at the Utah hotel, Salt Lake City, Utah. The notice from I. C. C. Secretary W. P. Bartel said it was anticipated that "a commissioner will be present at each of the hearings assigned outside of Chicago" Division 2, consisting of Commissioner's Aitchison, Mahaffie, Splawn and Alldredge, is in charge of the case.

Mr. Bartel also said that testimony "of a general nature and testimony relating to interterritorial rate questions and problems" would be expected at the Chicago sessions. He added that the commission also expected that "issues and problems particularly affecting interterritorial traffic in Central Freight, Illinois Freight, and Western Trunk-Line territories will likewise be presented at the Chicago hearing."

The I. C. C. secretary attached to his notice a copy of the "special rules of practice" to be applied for purposes of all the hearings. Among other things, these special rules say that persons appearing in opposition to the railroad petitions will be considered as protestants, and may be heard without the filing of petitions of intervention. They also embody a call for simplification of presentations, "strongly" urging that persons finding themselves with common interests "shall, to the greatest possible extent, endeavor to consolidate their presentation of testimony, and arrange for cross-examination by as few counsel as possible." The same course, the special rules add, "should be followed upon oral argument."

There is also a request that evidence be carefully prepared "with a view to conciseness and clarity, and so as to avoid unnecessary extraneous, immaterial, and irrelevant matter, and undue accumulation of testimony or of witnesses upon any point." Moreover, the evidence "should be factual in character, and argument should be reserved for the oral argument stage, and not be incorporated in testimony."

Witnesses who expect to read from written statements are warned that they should have sufficient copies thereof; but it is suggested that such statements be prepared and offered as verified statements instead of being submitted orally from the witness stand. Verified statements will be received for the record in the absence of objection; and they may be mailed, addressed to the commission at the hotels in the cities in which the proceedings are assigned for hearings.

Persons who desire to be heard are advised that they can facilitate matters by sending notice by letter or telephone to the commission at Washington, stating the number of witnesses, the places at which they will attend hearings, and the approximate amount of time necessary for presentation of direct testimony. Such notices should reach the commission "prior to July 17."

Motor Carrier Costs

The Interstate Commerce Commission has issued "as information" a study entitled "The Meaning and Significance of the Out-of-Pocket, Constant, and Joint Costs in Motor Carrier Operation," which was prepared in the Bureau of Transport Economics and Statistics under the direction of Ford K. Edwards, head cost analyst. The study, a document of 32 mimeographed sheets, is Statement No. 4614 of the Bureau.

Director W. H. S. Stevens of the Bureau identifies it in the preface as the "second study of a series dealing with the analysis of transportation costs," the first having been "Rail Freight Service Costs in Various Rate Territories of the United States," which was introduced in the No. 28300 investigation of the class rate structure and published in 1943 as Senate Document 63, 78th Congress, first session.

The present study's introductory statement says that its purpose "is to provide such minimum description of the nature and characteristics of motor carrier costs as will give the reader an understanding not only of the principles underlying the segregation and treatment of the out-of-pocket (long-run variable) costs, the joint costs and the constant costs, but also of the economic significance which is attached to each of these elements of costs from the standpoint of rate making." The statement adds that there was "no thought herein of making any new contribution to cost or rate theory; rather the endeavor is to portray the basic principles which have been evolved by those working in the field of transportation costs and the relation of these costs to rate making."

Cancels Chicago Hearings on Truck-Forwarder Agreements

Canceling the previously-assigned July 15 Chicago hearing, the Interstate Commerce Commission has now announced that it will begin hearings July 8 at New York in the No. 29493 investigation which it has instituted for the purpose of determining "reasonable, just and equitable terms and conditions under which agreements may be made for the utilization by freight forwarders of services and instrumentalities of common carriers by motor vehicle."

The notice announcing this transfer of the opening session from Chicago to New York stated that there was no change in that part of the previously-announced schedule which calls for other New York sessions beginning September 9.

Morse, Failing to Get Strike Probe, Issues Blast

Failing to obtain Senate education and labor committee approval of his proposed investigation of events leading up to the settlement of the recent railroad strike, Senator Morse, Republican of Oregon, issued a July 1 statement asserting that if the investigation had been held it would have shown that the White House "mishandled" the controversy and that J. J. Pelley, president of the Association of American Railroads, was "in league" with President Truman's advisers. Introduction of the resolution followed denial by Administration spokesmen of the senator's charge that the President, in delivering his May 25 strike message to Congress, put on "one of the cheapest exhibitions of ham acting I have ever seen, because he knew full well before he went to the rostrum what the position of the American railroad workers was."

Under the resolution the proposed investigation would have been conducted by the committee on education and labor, and

before that committee's adverse vote Senator Morse had introduced an amendment which would have armed the investigators with power of subpena and provided them with $10,000 for expenses.

"This afternoon," the senator's July 1 statement said, "the Senate committee on education and labor voted against reporting out my resolution, Senate Resolution 278, calling for an investigation of the events leading up to the settlement of the railroad strike on May 25, 1946. Every Democrat on the committee voted against my resolution and every Republican on the committee voted for it. The opposition votes of the Democrats is clear evidence that the Democrats are afraid to face such an investigation because they well know that the evidence disclosed at such an investigation should show that the White House completely mishandled the recent railroad controversy. Such an investigation would also show that Mr. J. J. Pelley, president of the Association of American Railroads and the representative for the carriers in the dispute, was in league with the White House advisers in doing the great injustice that was done to the legitimate rights of railroad workers in the country involved in the dispute."

Lack of Specialties Retards Passenger Car Deliveries

Only 15 railroad passenger cars — the same as April's production—were built in May, according to Civilian Production Administrator John D. Small's latest "Monthly Report on Civilian Production." The report discloses that the backlog on firm orders total 2,886 cars, of which 2,463 are for domestic roads and 423 for export; and it attributes the delay on shipments to carriers to slow deliveries of specialties and component parts, including air conditioning equipment, generators, lighting equipment, seats, roller bearings and hardware necessities.

The report adds that the shortage of materials resulting from the coal strike was the chief contributing factor to the decline of freight car production during May, when 4,022 cars were manufactured compared with 5,251 during the previous month. The total of freight cars on order was put at approximately 85,000, including 41,500 for domestic use and 43,500 for export.

May production of locomotives totaled 146 steam engines—9 for domestic use and 137 for export—and 66 Diesel-electrics, of which 62 were for domestic roads. Production of locomotives returned to normal in May, following an extended work stoppage in April, the report says.

Brazilian Transportation Head Visits I. C. C.

Colonel Edmundo Nacedo Soares, minister of transportation and public works of Brazil, recently visited the offices of the Interstate Commerce Commission in Washington, D. C., as the guest of Commissioner Clyde B. Aitchison. Colonel Soares returned a visit made by Commissioner Aitchison to Brazil last year, as noted in *Railway Age*, March 3, 1945, page 431.

Equipment and Supplies

LOCOMOTIVES

The Chilean State Railways have ordered 12 steam locomotives of the 4-8-2 type with a 5½-ft. gage from the Baldwin Locomotive Works.

Construction

Hampton & Branchville.—Division 4 of the Interstate Commerce Commission has authorized this road to extend its line from Hampton, S. C., to connect with the Seaboard Air Line at Luray and with the Southern near Lena, a total distance of approximately 12 miles. The proposed construction is the result of a situation arising out of the refusal of the Atlantic Coast Line to extend its transit rates on materials processed at the Hampton plant of the Plywoods-Plastics Corporation to traffic interchanged with the applicant, thus leaving the latter unable to compete for a haul on a substantial part of the plywood company's business.

The plant is served directly by the applicant and in part by the Charleston & Western Carolina, an A. C. L. affiliate which has a joint-track arrangement with the H. & B. over the latter's property under an agreement terminable on 30 days' notice. The C. & W. C. connects with the Walterboro branch of the A. C. L. at a point 17 miles from Hampton, thus giving that system its own route to the plant. The A. C. L. was among the protestants, other objectors being communities located along its Walterboro branch. In acting favorably on the application, the commission imposed conditions calculated to allay fears expressed by the objectors.

The conditions are: (1) the applicant shall agree that if within five years from July 21, the effective date of the commission's order, the A. C. L. is permitted to abandon its line from Walterboro, S. C., to Ehrhardt, [the Walterboro branch], it will purchase that property for a price equivalent to its fair net salvage value and continue the operation thereof in the event the certificate authorizing abandonment is so conditioned and the applicant is not otherwise released from such obligation by the I. C. C.; (2) the H. & B. shall agree to permit the C. & W. C. free access to all portions of the plants operated by the Plywoods-Plastic Corporation at Hampton so long as that industry shall be operated, provided that the C. & W. C. bears its fair proportion of the cost of installations, changes, repair, maintenance and upkeep of any tracks which may be involved and jointly used; (3) the H. & B. shall agree to permit the C. & W. C. free access on similar terms to any other industry that hereafter may be established at Hampton, to which it may control the means of entry, provided that the C. & W. C. shall by July 21 enter into an agreement with the H. & B. that the latter shall likewise be permitted free access on similar terms to any industry to which the C. & W. C. may control the means of entry and (4) no division may be established by the H. & B. with the Seaboard or Southern in connection with traffic handled over the extension that has the effect of according the H. & B. a greater proportion of the revenues on any commodities than does the division contemporaneously in effect for like rates on the same commodities in connection with the A. C. L. or the C. & W. C., except upon prior approval by the I. C. C.

Commissioner Mahaffie, dissenting, said that in his judgment the record did not support the finding of public convenience and necessity requisite for the grant of the certificate sought. For him, the record was "persuasive" that the remedy "is appropriately provided in the statute in regulatory clauses rather than through the means of granting authority for additional construction which is not otherwise required." Additional details were given in *Railway Age* of February 9, page 341, where Examiner Jerome K. Lyle's proposed report was noted.

New York, New Haven & Hartford.—This road has been authorized to undertake a project which includes the installation of an annealing furnace, the removal and relocation of forges, a blower and an air hammer at the locomotive shops in Readville, Mass. The approximate cost will be $32,000.

The Norfolk & Western plans to spend approximately $3,000,000 on its line between Portsmouth, Ohio, and Cincinnati, to provide speedier, safer and more efficient movement of traffic over the line, it has announced. Invitations to bid on various phases of the project — such as highway changes, bridges, culverts and grading, etc.—were sent to a number of contractors. The program is expected to be completed in about one year.

The project includes the installation of centralized traffic control on 96 miles of the line between Vera, Ohio, and Clare; changing the location of about 4½ miles of track between Mineral Springs and Plum (about 27 miles west of Portsmouth), and changing the grade of the track for a distance of about two and one-half miles between Plum Run and Peebles. The project will eliminate several curves and a severe grade of Beaver Pond hill.

Abandonments

California, Shasta & Eastern.—This road has applied to the Interstate Commerce Commission for authority to abandon 15.3 miles of line between Bella Vsta, Calif., and Anderson.

Fordyce & Princeton.—This road has applied to the Interstate Commerce Commission for authority to abandon 5.9 miles of line between Fordyce, Ark., and Ivan.

Flint River & Northeastern.—This road has applied to the Interstate Commerce Commission for authority to aban-

don its entire 23-mile line from Pelham, Ga., to Ticknor, including terminal facilities at Pelham.

GAINESVILLE MIDLAND.—This road has applied to the Interstate Commerce Commission for authority to abandon that portion of its line between Belmont, Ga., and Monroe, approximately 32 miles. The applicant also asks authority to abandon operation under trackage rights over the Georgia at Monroe.

LOUISVILLE & NASHVILLE. — Division 4 of the Interstate Commerce Commission has authorized this road to abandon its so-called Connellsville branch, which extends approximately 1.34 miles between Connellsville Junction, Ala., and Connellsville.

NEW YORK, NEW HAVEN & HARTFORD.—Trustees of this road have applied to the Interstate Commerce Commission for authority to abandon an 8-mile New York harbor car float line between Oak Point and Pier 38, East river.

PITTSBURG COUNTY.—This road has applied to the Interstate Commerce Commission for authority to abandon its entire line, the main segment of which extends from McAlester, Okla., to Hartshorne, a distance of 18.44 miles.

SOUTHERN PACIFIC.—The certificate issued in Finance Docket No. 12791, which authorized abandonment by the Southern Pacific Company, the Central Pacific and the Southern Pacific of certain lines in Alameda, Calif., and the abandonment of operation by the Interurban Electric of lines in Alameda and San Francisco counties, Calif., as reported in *Railway Age*, November 16, 1940, page 778, has been modified by Division 4 of the Interstate Commerce Commission to impose employee-protection conditions similar to those imposed in the precedent-setting Burlington case, 257, I. C. C. 700. The proceedings (F. D. No. 12792 was also involved) were reopened upon petition of the Brotherhood of Railroad Trainmen, and the roads agreed to the certificate's modification.

Supply Trade

Don C. Wilson has retired as vice-president, railway sales, Edison Storage Battery division, **Thomas A. Edison, Inc.**

The **New York Belting & Packing Co.**, of Passaic, N. J., is celebrating its 100th anniversary this year.

The railroad department of the **Ashton Valve Company**, Chicago, has been moved to 140 South Dearborn street, Chicago 3.

The **H. K. Porter Company** has announced the removal of its Boston, Mass., office to 294 Washington street, room 735, Boston 8.

The railroad sales division of the **Rust-Oleum Corporation**, Evanston, Ill., has expanded the sales territory of **Joseph M. Welles** to include the entire Pacific coast area. Mr. Welles will work exclusively in railway sales from headquarters at 5421 Santa Fe avenue, Los Angeles, Calif.

Carlos F. Noyes, retired former comptroller of the **Baldwin Locomotive Works**, has been elected a director and a member of the executive committee.

James McComb, C. P. Corrigan and **R. P. McClave** have been appointed to the sales staff of the Ramapo Ajax division of the **American Brake Shoe Company.**

Buckley M. Byers has been appointed assistant manager of the New York office of the **A. M. Byers Company.** Mr. Byers will be in charge of export sales.

Thomas G. Franzreb and **Donald Keating** have been appointed to the technical service division of **Turco Products, Inc.**

Charles W. T. Stuart, whose election as vice-president in charge of sales of the **Safety Car Heating & Lighting Co., Inc.**, with headquarters in New York, was announced in the *Railway Age* for June 8, is a graduate of the Drexel Institute of Technology. He began his business career

Charles W. T. Stuart

with the Baldwin Locomotive Works in 1908. After being employed in the motive power department of the Pennsylvania from 1909 to 1924, he joined Safety Car Heating & Lighting in the latter year as a sales representative.

In 1933, Mr. Stuart was appointed Southeastern district manager for the company and Philadelphia, Pa., manager of the Vapor Car Heating Company. In September, 1943, he was appointed assistant to the president of Safety Car Heating & Lighting, holding that position until his recent promotion. Mr. Stuart is the author of the book "Car Lighting by Electricity", which was originally published in 1921 and 1922 as a series of articles in the Railway Electrical Engineer.

Robert K. Spofford, formerly assistant purchasing agent of the **Okonite Company**, Passaic, N. J., has been appointed purchasing agent to succeed the late George S. Hayes.

Leon A. Paddock retired on July 1 as president of the **American Bridge Company** and the **Virginia Bridge Company.** His successor as head of these subsidiaries of the United States Steel Corporation has not yet been announced.

The **Detrex Corporation** has announced that the new location of its administrative staff and plant headquarters is 14331 Woodrow Wilson avenue, Detroit, Mich. All mail and general operational matters should be referred to box 501, Roosevelt Park annex, Detroit 32.

Frederick A. Stevenson, president of the American Car & Foundry Company, has been elected a member of the executive committee of the **Carter Carburetor Corporation**, wholly-owned subsidiary of American Car & Foundry. **John L. Farrell** was elected a director of Carter Carburetor.

Carroll A. Sinclair, recently returned from service in the Far East as an American counter-intelligence agent, has been appointed sales representative by the **Whiting-Adams Company, Inc.**, paintbrush manufacturers of Boston, Mass. Mr. Sinclair's sales area includes Texas—where he will have headquarters in Dallas — Oklahoma, Arkansas and Louisiana.

William P. Husband, Jr., president and treasurer of the Ashton Valve Company, Cambridge, Mass., has been elected also president and treasurer of the **Crosby Steam Gage & Valve Co.**, Boston, Mass. Substantial advantages will accrue to the customers of both companies as a result of joint management, it was announced. Improvement in products and the elimination of duplication will reduce operating costs.

Paul D. Mallay, who has been manager, railroad division, in the sales department of the **Lukens Steel Company** and its subsidiaries, the By-Products Steel Corporation and Lukenweld, Inc., resigned on June 24. Mr. Mallay announced that he plans to organize his own business as a manufacturers' agent to service the railroad industry, but has not yet determined where he will make his headquarters.

The **Atlas Lumnite Cement Company** has been merged into the **Universal Atlas Cement Company,** it was announced by the latter firm. Both companies are wholly-owned subsidiaries of the United States Steel Corporation. The organization of the former Atlas Lumnite Cement Company will be known as the Lumnite division of Universal Atlas Cement, with headquarters at 135 East 42nd street, New York 17.

The **United States Steel Supply Company**, a subsidiary of the United States Steel Corporation, has resumed the operation of its Boston, Mass., warehouse after more than 3½ years' service to the Navy as a depot in the handling of war material. **C. D. Surette, Jr.**, has been appointed district manager to head the Boston organization. Plans are being made, it was announced, for the installation of new equipment which will facilitate the service of the warehouse to steel users in the Boston market area.

Frank K. McDanel, vice-president in charge of manufacturing operations of the **American Bridge Company** (a subsidiary of the United States Steel Corporation),

has been elected president of American Bridge and of the **Virginia Bridge Company,** with headquarters at Pittsburgh, Pa. He succeeds **Leon A. Paddock,** who has retired. **Austin J. Paddock,** manager of the American Bridge Gary (Ind.) plant, has been elected vice-president in charge of manufacturing operations of American Bridge, with headquarters also at Pittsburgh, relieving Mr. McDanel, and **William A. Thiel,** master mechanic, has been promoted to manager of the Gary plant, replacing Mr. Austin J. Paddock.

OBITUARY

William James George, assistant to the president of the Edgewater Steel Company, died on June 17. He was 53 years old. Born in Lonaconing, Md., Mr. George attended the Carnegie Institute of Technology. He had been connected with Edgewater Steel since the company's organization in 1916.

Financial

BALTIMORE & OHIO.—*Equipment Trust Certificates.*—This road has accepted a bid of 99.011 per cent of par made by the Philadelphia National Bank for $4,060,000 equipment trust certificates, series Q, bearing yearly interest at the rate of 1½ per cent and payable in ten equal annual installments, representing an interest cost to the company of 1.69 per cent. (For previous item, see *Railway Age,* June 22, page 1239.)

BOSTON & MAINE.—*Acquisition.*—This road has applied to the Interstate Commerce Commission for authority to acquire the properties of the Troy & Bennington, except the right of the latter to exist as a corporation, for $301,600, a sum equivalent to $200 a share on the T. & B.'s outstanding capital stock plus incidental expenses expected to be incurred in connection with the acquisition. The applicant has operated the T. & B. under lease since 1900 and owned 90.3 per cent of its stock as of May 31.

CANADIAN NATIONAL. — *Acquisition.* — The Canadian House of Commons has passed a bill authorizing this road to purchase for $7,000,000 the Manitoba Railway Company, a wholly-owned subsidiary of the Northern Pacific. (For previous item see the *Railway Age* for June 22, page 1239).

CHICAGO NORTH SHORE & MILWAUKEE.—*Reorganization.*—The reorganization plan for the Chicago North Shore & Milwaukee was confirmed by Federal District Judge Michael L. Igoe, Chicago, on June 27, and, at the same time, he issued an order approving the new board of directors recommended by the road's trustees. The plan which will be retroactive to January 1 will be declared effective as soon as incorporation papers are issued by the state of Illinois and the issuance of securities of the new company has been approved by the Illinois Commerce Commission and the Wisconsin Public Service Commission. The new corporation will issue 500,000 shares of no-par common stock, which will be exchanged for bonds of the present company, and will assume various equipment trust obligations of the present corporation. There will be no bonded indebtedness. Nominated as directors of the new company are: Ralph A. L. Bogan, executive vice-president, Greyhound Corp.: Ralph R. Bradley, general counsel for the trustees; Manferd Burleigh, president and general manager, Great Lakes Greyhound Lines; B. J. Fallon, chief executive officer of the North Shore; B. P. Lester, president Lester & Co., investment bankers; W. Irving Osbourne, Jr., president, Cornell Wood Products Company, and Hummel and Downing; James F. Stiles, Jr., vice-president and treasurer, Abbot Laboratories; Glenn W. Traer, chairman of the board, Truax-Traer Coal Company; and Edgar L. Wood, attorney for the trustees of the road in Wisconsin.

DELAWARE, LACKAWANNA & WESTERN. —*Tax Appeal Dismissed.*—This road's appeal against a 1945 franchise tax assessment of $1,580,740 has been dismissed by the division of tax appeals of the New Jersey State Department of Taxation and Finance.

DENVER & SALT LAKE.—*Annual Report.* —Operating revenues of this road in 1945 amounted to $3,451,863, compared with $3,345,910 in the preceding year. Operating expenses totaled $2,618,016, compared with $2,678,415. Net income was $51,489 compared with $1,812. Current assets at the end of the year were $1,537,328, compared with $1,391,634. Current liabilities were $1,543,876, compared with $1,320,418. Long term debt was unchanged at $12,500,000.

DULUTH, SOUTH SHORE & ATLANTIC.— *Annual Report.*—Operating revenues of this road in 1945 amounted to $4,061,969, compared with $4,306,704 in the preceding year. Operating expenses were $3,395,388, compared with $3,372,931. Fixed charges totaled $895,549, compared with $896,496. The net deficit was $519,927, compared with a net deficit of $262,690. Expenses for maintenance of way and structures totaled $841,701, a decrease of 1.23 per cent under the figure reported for 1944. Expenses for the maintenance of equipment increased $4,820 to $699,003.

INDIANAPOLIS UNION. — *Refunding.* — Division 4 of the Interstate Commerce Commission has authorized this road to issue $6,500,000 of 2½ per cent series C refunding and improvement mortgage bonds, to be sold at 98.31 per cent of par and accrued interest, the price at which the issue had been sold (subject to commission approval) to a banking group headed by Halsey, Stuart & Co. Proceeds, together with other funds, will be applied toward the redemption of $7,679,000 of outstanding 3½ per cent, series B, refunding and improvement mortgage bonds, due March 1, 1986, and redeemable September 1 at 107 and accrued interest. The new issue, guaranteed jointly by the New York Central and the Pennsylvania, and maturing June 1, 1986, will be redeemable at 104 and accrued interest between June 1, 1947, and December 1, 1954; at 103¾ between December 1, 1954, and December 1, 1962; at 103½ between December 1, 1962, and December 1, 1970, and from the latter date to December 1, 1983 at par plus a premium of one-fourth of 1 per cent for each year or fraction thereof between the designated date of redemption and December 1, 1983. On or about the latter date, they will be redeemable at par. The decision also authorized the Cleveland, Cincinnati, Chicago & St. Louis to assume liability with respect to the bonds pursuant to an indemnification agreement dated January 29, 1931, between that company and the N. Y. C.

LEHIGH VALLEY.—*Tax Appeal Dismissed.*—An appeal by this road against a 1945 franchise tax assessment of $999,775 has been dismissed by the division of tax appeals of the New Jersey State Department of Taxation and Finance.

NEW YORK CENTRAL.—*Annual Report.*— Operating revenues of this road in 1945 totaled $654,363,799, compared with $714,963,385 in the preceding year. Operating expenses amounted to $580,680,970, compared with $531,839,633. Fixed charges were $44,075,835, compared with $46,187,801. Net income was $24,412,525, compared with $35,789,939. Current assets at the end of the year were $273,215,388, a decrease of $20,015,149. Current liabilities were $123,430,747, a decrease of $70,250,499. Long term debt was $603,936,207, a decrease of $8,783,163.

The work of the road's industrial representatives continues to bear fruit, the report said. New industrial plants representing some of the largest producers in the country, as well as others local in character, have been established or are in the process of construction along the lines of the New York Central. During the year, sites on the main and affiliated lines were selected for the construction of 406 new industrial plants, which will constitute important sources of future traffic, estimated to exceed 200,000 cars annually. Many of these plants are now under construction, the report added.

NEW YORK, ONTARIO & WESTERN. — *R.F.C. Loan.* — This road has applied for Interstate Commerce Commission approval of purchase by the Reconstruction Finance Corporation of $2,600,000 in equipment trust certificates. proceeds of which will be applied toward the payment of $2,908,500 for 27 Diesel-electric locomotives, including 23 1,000-horsepower switching locomotives, two 1,500-horsepower freight locomotives and two 2,700-horsepower freight locomotives, to be purchased from the Electro-Motive Division of the General Motors Corporation. The equipment is to be delivered in September. According to the applicant, the loan will be repaid from operating revenues and operating cost savings.

PENNSYLVANIA.—*Dividend.*—Directors of this road on June 26, in declaring a dividend of 50 cents a share on the capital stock, payable on July 30 to stockholders of record on July 6, pointed out that the dividend had not been earned currently but would be paid from the earnings of prior years. It was said that in view of the estimated deficit of more than $31,000,000 for the first six months of the year it had been necessary to draw on previous earnings to pay

increased wages and prices for materials and supplies. Because of this, the management concluded that the stockholders should receive consideration through a distribution from the same source.

PERE MARQUETTE. — *Equipment Trust Certificates.*—This road has applied to the Interstate Commerce Commission for authority to assume liability for $850,000 in equipment trust certificates. to finance in part the acquisition of 200 50-ton automobile box cars (50 of them equipped with loaders) at a total cost of $1,083,874.

Average Prices Stocks and Bonds

	July 2	Last week	Last year
Average price of 20 representative railway stocks..	64.76	62.86	57.99
Average price of 20 representative railway bonds..	99.00	98.42	99.26

Dividends Declared

Atchison, Topeka & Santa Fe.—$1.50, payable September 3 to holders of record July 26.

East Pennsylvania.—$1.50, semi-annually, payable July 16 to holders of record July 1.

Norfolk & Western.—Common, $2.50, quarterly, payable September 10 to holders of record August 14; Adjustment preferred, $1.00, quarterly, payable August 9 to holders of record July 17.

Pennsylvania.—Irregular, 50¢, payable July 30 to holders of record July 6.

Reading.—25¢ quarterly, payable August 8 to holders of record July 11.

Railway Officers

EXECUTIVE

Arthur S. Genet, whose appointment as assistant vice-president — freight traffic, of the Chesapeake & Ohio and the Pere Marquette, with headquarters at Cleveland, Ohio, was announced in the June 29 issue of *Railway Age,* was born in 1910 at New York, and attended the United States Naval Academy, which he left to enter business in a position with the Bank of Manhattan.

Arthur S. Genet

Later, after serving as controller of the Central Coal Company and affiliated companies of New York, Mr. Genet joined the Metropolitan Coal Company of Boston in 1941, as treasurer. He was appointed vice-president of that company in 1942, then vice-president and controller of the National Carloading Company in 1943. Mr. Genet became president of the latter corporation in 1944, which was the post he held until his recent appointment as assistant vice-president for the C. & O. and the Pere Marquette.

Charles J. Brister, vice-president — freight traffic, at New York, of the New York Central for more than 15 years, retired on July 1.

F. E. Bates, executive assistant of the Missouri Pacific Lines, at St. Louis, Mo., has been promoted to senior executive assistant in charge of the Gulf Coast Lines and the International-Great Northern, with headquarters at Houston, Tex., succeeding **Paul J. Neff,** whose election to chief executive officer of the system, was reported in the *Railway Age* of June 1. **H. M. Johnson,** chief traffic officer, has been advanced to executive assistant with headquarters as before at St. Louis, replacing Mr. Bates.

Mr. Bates was born at Allison, Iowa, on January 3, 1889, and was graduated

F. E. Bates

from the University of Wisconsin in 1908. Following graduation he entered railroad service in the engineering department of the Chicago, Milwaukee, St. Paul & Pacific, but left the next year to go with the Kansas City Terminal as a draftsman. Eight months later he re-entered the service of the Milwaukee. Mr. Bates went with the Missouri Pacific on November 13, 1913, as an assistant engineer, and in 1919 he was promoted to assistant bridge engineer. On August 1, 1923, he was advanced to bridge engineer, and in July, 1938, he was promoted to chief engineer. In June, 1945, he was advanced to the position he held at the time of his new appointment.

James N. Flowers, vice-president and general counsel of the Gulf, Mobile & Ohio, at Mobile, Ala., has been elected vice-president, law, with the same headquarters.

C. E. Huntley, whose election as president of the Tennessee Central was reported in the *Railway Age* of June 29, was born in 1897, in Norwalk, Conn., and received his higher education at Syracuse univerity, where he received the LL.B. degree in 1920. Prior to completing his education he served in the United States armed forces during World War I, and later was employed by the Pennsylvania. Upon his graduation from the university, he entered the field of corporation finance and investment banking in Philadelphia, Pa., and subsequently became an investment analyst and consultant to commercial banks, insurance companies and investment brokers. Mr. Huntley has specialized in the field of railroad statistics and finance, and is the author of several volumes on these subjects.

Alfred Blauel, freight traffic manager of the Erie, with headquarters at Chicago, has been appointed assistant vice-president at New York, succeeding **L. B. Burford,** who retired on June 30 after 44 years' service.

FINANCIAL, LEGAL AND ACCOUNTING

Everett R. Vaughn, assistant general attorney of the St. Louis Southwestern at St. Louis, Mo., has been promoted to general attorney, with the same headquarters.

Y. D. Ward, claim agent of the St. Louis Southwestern, has been promoted to general claim agent, with headquarters as before at Pine Bluff, Ark., succeeding **S. G. Seabrook,** who has retired after more than 40 years of service.

G. W. Oakley, assistant auditor of revenues of the Erie, has been appointed auditor of disbursements, with headquarters as before at Cleveland, Ohio, succeeding **J. G. Austin,** whose retirement was reported in the June 29 issue of *Railway Age.*

Jay G. Corn, whose promotion to assistant general auditor of the Texas & Pacific, with headquarters at Dallas, Tex., was reported in the *Railway Age* of June 15, was born at Jacksboro, Tenn., on February 12, 1896, and received his higher education at the Oklahoma A. & M. college, Stillwater, Okla. He entered railway service on May 4, 1915, in the accounting department of the T. & P., serving in various

Jay G. Corn

minor capacities, and then was granted a leave of absence to serve overseas with the American Expeditionary Force during World War I. Mr. Corn returned to the T. & P., in July, 1919, and was appointed chief bill clerk, later being promoted con-

secutively to assistant general bookkeeper, general bookkeeper, general accountant, chief clerk to the general auditor and assistant to the general auditor, holding the latter position at the time of his new appointment.

E. R. Belt, general auditor of the St. Louis-San Francisco at St. Louis, Mo., has been promoted to chief accounting officer, with the same headquarters, succeeding **G. B. Perkins,** who has retired after 38 years of service.

Donald S. Wright, assistant general counsel of the Gulf, Mobile & Ohio, at Mobile, Ala., has been promoted to general counsel, with the same headquarters, succeeding to the duties of **James N. Flowers,** whose election as vice-president, law, is reported elsewhere in this issue.

V. N. Wahlberg, whose promotion to general auditor of the Great Northern with headquarters at St. Paul, Minn., was reported in the *Railway Age* of June 8, was born at St. Paul on October 3, 1888. He entered railway service in 1904 in the accounting department of the Great Northern, holding various positions until 1912

V. N. Wahlberg

when he was advanced to field engineer on construction and on valuation at St. Paul. In 1918 he was further advanced to assistant valuation accountant, becoming engineering accountant two years later. In 1929 Mr. Wahlberg was promoted to assistant general auditor, with headquarters as before at St. Paul, the position he held at the time of his new appointment.

Ralph Blaisdell, chief accounting officer of the Florida East Coast, whose retirement was announced in the June 22 issue of *Railway Age,* was born on August 23, 1864, at Hanover, N. H., and entered railroad service in 1885 as a clerk for the Boston, Hoosac Tunnel & Western (now the Boston & Maine), and subsequently served a number of lines as auditor, and in other important financial posts. In 1918 he became federal auditor of all Union Pacific transportation lines in the northwest, and in 1920, treasurer of the United States Railroad Administration with headquarters at Washington, D. C. From 1924 to 1926, Mr. Blaisdell represented banking and other interests in various industrial corporations, then in 1927 joined the Florida East Coast as general auditor, with headquarters at St. Augustine, Fla., where in 1931 he advanced to the position from which he has now retired.

C. E. Coomes, whose appointment as chief accounting officer of the Florida East Coast, with headquarters at St. Augustine, Fla., was announced in the June 22 *Railway Age,* entered railway service in 1901

C. E. Coomes

as a clerk for the Illinois Central, Kentucky division. Within a few months he became accounting assistant at Louisville, Ky., where he was advanced to chief division accountant in 1905. In 1914, Mr. Coomes joined the Interstate Commerce Commission (Division of Valuation) at Chattanooga, Tenn., remaining there until May, 1917, when he went with the Florida East Coast as special accountant at St. Augustine. He was appointed auditor in 1921, and maintained that post until his recent promotion.

James W. Myers, whose retirement as assistant comptroller of the Baltimore & Ohio, with headquarters at Baltimore, Md., was announced in the June 1 issue of *Railway Age,* was born at Baltimore on October 15, 1887, and entered railroad service on March 3, 1903, as a messenger in the office of the auditor of disbursements of the Baltimore & Ohio. He held various clerical positions in that office from 1903 until April, 1918, when he became clerk of the United States Railroad Administration at Washington, D. C. He returned to the Baltimore & Ohio in August, 1918, as statistian in the office of the auditor of disbursements, and in March, 1920, he became chief clerk to the comptroller. On December 1, 1941, Mr. Myers was appointed general accountant, a position which he held until his appointment in 1943 to the post from which he recently retired.

OPERATING

T. P. Crymes, road supervisor of the Illinois Central at Memphis, Tenn., has been appointed trainmaster, with the same headquarters, succeeding **R. E. Lees,** who has been assigned to other duties.

C. L. Beals, general superintendent of the Florida East Coast, with headquarters at St. Augustine, Fla., has been named chief operating officer in charge of transportation and maintenance of way there. **F. L. Aitcheson,** assistant general superintendent, has been appointed assistant chief operating officer, with headquarters as before at St. Augustine. The office of general superintendent has been abolished.

W. D. Thompson, superintendent of the Lake Erie & Northern and the Grand River, has been appointed manager, with headquarters as before at Preston, Ont., succeeding **M. W. Kirkwood,** who retired on June 30.

A. D. Hanson, assistant to the general manager of the Union Pacific at Omaha, Neb., has been promoted to general superintendent of the Idaho division and of the Utah division north of Salt Lake City (Utah) with headquarters at Salt Lake City. Mr. Hanson was born at Elkhorn Neb., on February 20, 1899, and entered railway service on May 9, 1917, as a stenographer of the Union Pacific at North Platte, Neb. During 1918 and 1919 he served in the military service, returning to the Union Pacific to be consecutively a timekeeper, freight brakeman, clerk, night report clerk, car distributor and secretary to the general superintendent at North Platte. In 1933 Mr. Hanson was granted a leave of absence to serve as secretary to Wyoming's Governor Leslie

A. D. Hanson

A. Miller and as secretary of the Wyoming State Board of Charities and Reform, and the Board of Pardons. Upon his return to the railroad he became secretary to the vice-president in charge of operations at Omaha, and then was appointed chief clerk to the executive assistant, with headquarters at Los Angeles, Cal. In August, 1942, he was advanced to the position he held at the time of his new appointment.

J. T. Singent, personnel assistant to the vice-president of the Union Pacific at Omaha, Neb., has been advanced to assistant to the general manager, personnel, with the same headquarters, succeeding **A. D. Hanson,** whose promotion to general superintendent, with headquarters at Salt Lake City, Utah, is reported elsewhere in this column.

Ellis I. Smith, whose appointment as superintendent of telegraph of the Atlantic Coast Line, with headquarters at Wilmington, N. C., was announced in an earlier issue of *Railway Age,* was born on October 19, 1906, at Newton, Mass., and was graduated from Virginia Polytechnic Institute (electrical engineering) in 1931. He join-

ed the Western Union Telegraph Company that year at Jacksonville, Fla., as electrical apprentice, and soon advanced to division traffic superintendent at Atlanta, Ga., where he served as relief dispatcher and chief operator during 1934 and 1935, subsequently holding similar positions at various points

Ellis I. Smith

throughout the South. In 1938, Mr. Smith became night traffic manager at Nashville, Tenn., and later traffic manager there. He entered military service in February, 1942, as a second lieutenant in the U. S. Army, and after serving as chief signal officer at Washington, D. C., spent 34 months in Africa and Europe before his release in March of this year. Mr. Smith's appointment as superintendent of telegraph for the A. C. L. became effective on May 1.

Archibald S. Waller, whose promotion to division superintendent of the Baltimore & Ohio, with headquarters at Newark, Ohio, was reported in the *Railway Age* of June 8, was born at Washington, Ind., on October 20, 1895. He entered railway service on September 8, 1910, as a freight trucker at Washington, subsequently holding various minor positions until March 1, 1917, when he was advanced to yardmaster, with the same headquarters. He entered

Archibald S. Waller

the armed forces to serve during World War I in the latter year, returning to the B. & O., in September, 1919, as night general yardmaster, with headquarters at Washington, being advanced to general yardmaster four years later. On March 15, 1937, Mr. Waller was promoted to assistant trainmaster, with headquarters at Akron, Ohio, and in December of the same year he became trainmaster. On May 1, 1944, he was advanced to assistant division superintendent, with headquarters at Washington, the position he held at the time of his new appointment.

TRAFFIC

W. B. Battle, chief clerk of the passenger traffic department of the Texas & Pacific at Dallas, Tex., has been promoted to assistant to the passenger traffic manager, with the same headquarters.

C. E. Thomas, commercial agent of the Gulf, Mobile & Ohio, has been promoted to division freight agent, with headquarters at Mobile, Ala., succeeding **J. F. Ross,** who has retired.

R. H. Holter, whose appointment as general passenger agent of the Baltimore & Ohio, with headquarters at Baltimore, Md., was announced in the *Railway Age* of May 25, was born on June 29, 1909, at Upper Falls, Md., and entered railroading

R. H. Holter

in 1928 as a messenger for the B. & O. at Baltimore, where he has since served continuously. After advancing through the posts of office boy, clerk and stenographer, he became train secretary in 1933, secretary to the assistant general passenger agent later that year, and secretary to the general passenger agent, eastern lines, in 1936. Mr. Holter was appointed rate clerk in 1937, and advanced to assistant general passenger agent in January of this year. His promotion to general passenger agent became effective on May 16.

Frank P. Soen has been appointed general agent of the New York Central, with headquarters at Boston, Mass., succeeding **C. J. Cook,** who has retired after 48 years of service. **Joseph D. Gunther** has been named coal traffic agent at Boston.

John H. Hague, whose appointment as freight traffic manager in charge of sales and service of the Baltimore & Ohio, with headquarters at Baltimore, Md., was announced in the June 8 issue of *Railway Age,* was born on January 24, 1897, at Larimore, N. D., and attended Bishop's college, Quebec, and Purdue university. After service in the U. S. Naval Aviation Corps during World War I, Mr. Hague entered railroading with the Boston & Maine in 1919, leaving the next year to join the Central of Georgia as freight solicitor. He went with the B. & O. as traveling freight agent at Boston in 1923, and was appointed suc-

John H. Hague

cessively as freight representative in New York in 1929, district freight representative at San Francisco, Cal., in 1934, transferring to Cincinnati, Ohio, in 1936, and assistant general freight agent at Washington, D. C., in 1939. He was promoted to general freight agent at Washington in 1941, transferring to St. Louis, Mo., in 1943, where he remained until his recent advancement became effective on June 1, 1946.

James A. Argo, whose appointment as freight traffic manager of the Canadian National, with headquarters at Toronto, Ont., was announced in the June 22 issue of *Railway Age,* was born at Norval, Ont., on July 18, 1892, and entered railroading in 1911 in the engineering department of the Canadian Northern Ontario (now the C. N. R.). In 1916 he enlisted in the Canadian army and served overseas until 1919,

James A. Argo

when he returned to railway service for the C. N. R. at Toronto. After holding clerical positions there and at Montreal, Que., Mr. Argo became office assistant to the vice-president in 1927, then chief of the tariff bureau in 1930, and assistant general freight agent in 1939. He was appointed general freight agent at Montreal in 1940, trans-

News Department continued on second left-hand page

MORE LIMA-BUILT 2-8-4's

ordered for THE C AND O Fast Freight Service

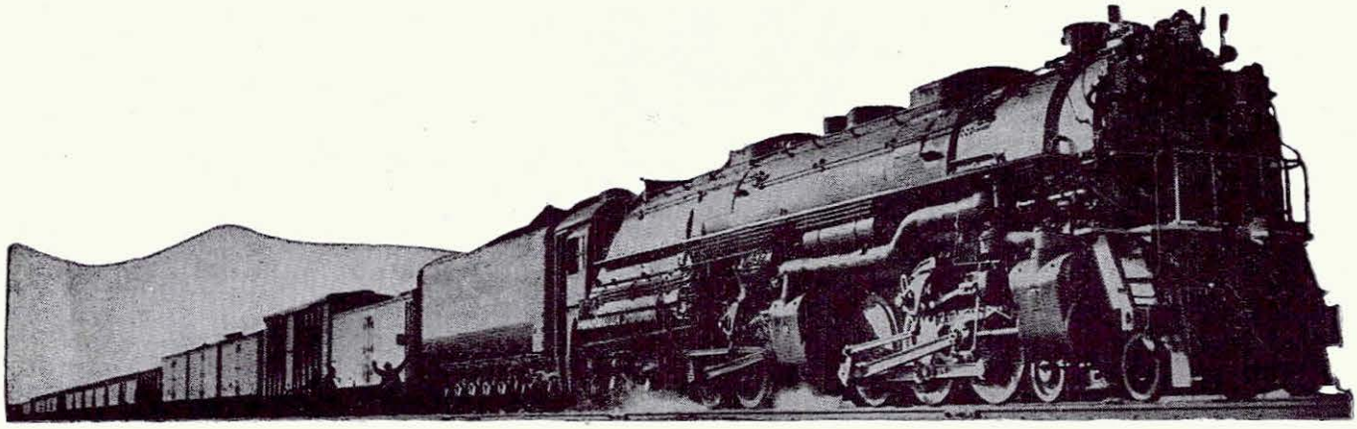
THE Chesapeake and Ohio fleet of Lima-built steam power will be increased by the addition of ten 2-8-4 type locomotives. These powerful steam locomotives will be of the K-4 Class and will be used by the C & O to augment the locomotives of this class already in service.

This re-order of steam power is another step in the C & O's progressive campaign to prepare for handling peacetime traffic as efficiently as they met wartime transportation needs.

LIMA LOCOMOTIVE WORKS LIMA LOCOMOTIVE WORKS INCORPORATED INCORPORATED, LIMA, OHIO

SECURITY CIRCULATORS

are a good investment . . .



for any <u>one</u> of these important reasons

1. They improve the circulation of the water in the boiler.
2. They aid in maintaining the steaming capacity of the boiler.
3. They reduce honeycombing, flue plugging and cinder cutting.
4. They permit the use of a 100% arch, and prolong the life of arch brick.

AMERICAN ARCH COMPANY, INC.

NEW YORK • CHICAGO

SECURITY CIRCULATOR DIVISION

ferring to Toronto in 1945, which post he maintained until his recent promotion.

George F. Mills, division freight agent of the Erie at Jamestown, N. Y., has been promoted to general agent, with headquarters at Los Angeles, Cal. **Robert T. Phillips,** has been appointed division freight agent at Jamestown, succeeding Mr. Mills.

George A. Lamb, freight traffic manager of the Erie, has been appointed coal traffic manager, with headquarters as before at Cleveland, Ohio. **Charles R. Martin,** assistant general freight agent there, has been named to succeed Mr. Lamb, while **Dwight C. Kelsey** succeeds Mr. Martin.

J. W. Phipps, Jr., whose appointment as general freight traffic manager of the Baltimore & Ohio, with headquarters at Baltimore, Md., was announced in the June 8 issue of *Railway Age,* was born at Towson, Md., on October 8, 1895. He entered the service of the Baltimore & Ohio as clerk at Baltimore, later advancing to stenographer and secretary at Chicago, then at New York, then at Pittsburgh, Pa., and returning to Chicago and Baltimore. He served in the American Expeditionary

J. W. Phipps, Jr.

Forces in France for a year during World War I, then returned to the B. & O. in 1920 as traveling industrial agent at Pittsburgh. He was promoted to industrial agent at St. Louis, Mo., in 1924, then division freight agent at Baltimore in 1931. Mr. Phipps was named assistant general freight agent at Washington, D. C., in 1937, transferring to Cleveland, Ohio, in 1939, then advancing to general freight agent at Philadelphia, Pa., in 1941. He maintained the latter post until his recent appointment.

Clifford C. Hahne, whose promotion to assistant freight traffic manager of the Missouri Pacific, with headquarters at St. Louis, Mo., was reported in the *Railway Age* of June 15, was born at St. Louis on September 7, 1903. He entered railway service on April 13, 1922, as a clerk of the Missouri Pacific at St. Louis, subsequently serving in various clerical and secretarial capacities in the accounting and traffic departments until January 1, 1938, when he was advanced to general agent, with headquarters at Shreveport, La. On October 16, 1941, Mr. Hahne was promoted to general freight agent at St. Louis, and one year later he was transferred to Houston, Tex., remaining in that location until his new appointment.

W. J. Honan, whose appointment as assistant freight traffic manager of the Baltimore & Ohio, with headquarters at New York, was announced in the *Railway Age* of June 8, entered railroading in 1910 as a messenger for the B. & O. at New York. Remaining in that city, he advanced successively through various clerical positions, including mail boy, claim clerk, assistant

W. J. Honan

rate clerk, and export clerk, becoming chief clerk in the general export freight office in 1920. Later that year, Mr. Honan was named freight representative, then was promoted to assistant foreign freight agent in 1923. He became foreign freight agent in 1928, and maintained this post until his advancement on June 1.

F. J. Wild, general agent of the Erie at Jersey City, N. J., has been appointed assistant general passenger agent, with headquarters at New York, succeeding **F. A. Waldron,** who has retired after 48 years of service. **J. H. Dimke,** general agent at New York, has been transferred to Jersey City to succeed Mr. Wild, while **R. H. Martin,** city passenger agent at New York, succeeds Mr. Dimke there.

Eric C. Hallberg, assistant freight traffic manager of the Erie at Chicago, has been appointed freight traffic manager there, succeeding **Alfred Blauel,** whose promotion is announced elsewhere in these columns. **Fred M. Klitz,** general freight agent at Chicago, succeeds Mr. Hallberg, while **Hugh T. Sweeney,** assistant general freight agent there, succeeds Mr. Klitz. **Harry L. Visard** has been named assistant general freight agent, succeeding Mr. Sweeney, and the post of chief of tariff bureau has been abolished.

Russell E. Blumenstiel, assistant general passenger agent of the Seaboard Air Line at Tampa, Fla., has been appointed general passenger agent there. **John W. Small,** division passenger agent, has been named assistant general passenger agent, with headquarters as before at Norfolk, Va. **E. R. Matthews,** division passenger agent, has been appointed assistant general passenger agent, with headquarters remaining at St. Petersburg, Fla. **C. W. Small,** division passenger agent at Savannah, Ga., has been named assistant general passenger agent there. **James L. Carter,** division passenger agent, has been appointed assistant general passenger agent, with headquarters as before at Columbia, S. C.

Effective July 1, the date of the merger of the Alton and the Gulf, Mobile & Ohio, **R. A. Pearce,** passenger traffic manager of the Alton, at Chicago, was given jurisdiction over passenger traffic matters of both the Alton and the G. M. & O., and after August 1 will maintain quarters at St. Louis, Mo. The former headquarters of the two roads, located respectively at Chicago and Mobile, Ala., will be moved to St. Louis when the necessary quarters are completed on August 1. In taking over the passenger traffic department of the G. M. & O., Mr. Pearce succeeds to the duties of **P. E. Geil,** whose appointment as vice-president of the Gulf Transport Company, a subsidiary of the G. M. & O., is reported elsewhere in this issue.

Harold W. Kassling, whose promotion to general freight agent of the Missouri Pacific, with headquarters at Houston, Tex., was reported in the *Railway Age* of June 15, was born at St. Louis, Mo., on May 27, 1908, and is a graduate of Washington university, St. Louis. He entered railway service on April 1, 1929, with the Missouri Pacific where he held various clerical and secretarial positions until 1937 when he was advanced to traffic representative, with headquarters at St. Louis. For a short time thereafter he served as a clerk, and in August, 1940, he was promoted to special traffic representative, with the same headquarters. On October 1 of the latter year Mr. Kassling became supervisor of the freight traffic department at St. Louis, and on August 1, 1944, he was advanced to assistant general freight agent, with headquarters at Houston, the position he held at the time of his new appointment.

C. H. Mathews, Jr., passenger traffic manager of the Pennsylvania system, with headquarters at Philadelphit, Pa., has been granted a year's leave of absence, during which time he will be available for consultation and service. **E. R. Comer,** general passenger agent at New York, has been promoted to passenger traffic manager of the system at Philadelphia, and **Homes Bannard,** general passenger agent at Washington, D. C., succeeds Mr. Comer at New York. **R. H. Clare,** assistant general passenger agent at Philadelphia, has been named to succeed Mr. Bannard at Washington, while **W. G. Savage,** also assistant general passenger agent at Philadelphia, retains the same designation, but has been promoted to Mr. Clare's duties, and **W. P. Eckfeldt,** chief clerk to the general passenger agent at New York, has become assistant general passenger agent at Philadelphia, succeeding Mr. Eckfeldt.

ENGINEERING & SIGNALING

W. E. Kearfott, division engineer of the Akron division of the Baltimore & Ohio, with headquarters at Akron, Ohio, has been transferred to Punxsutawney, Pa., as division engineer of the Buffalo division. **J. G. Collinson,** division engineer at

News Department continued on next left-hand page

HEAT *Saved* is FUEL *Saved*

With the increase in cost of fuel, it is of paramount importance to reclaim as much as practicable of the heat in exhaust steam.

Boiler feedwater is the best medium for accomplishing this recovery.

The most practical equipment to effect this reclamation is the Elesco exhaust steam injector. It recovers heat from exhaust steam, feeds the boiler, saves fuel or increases boiler capacity.

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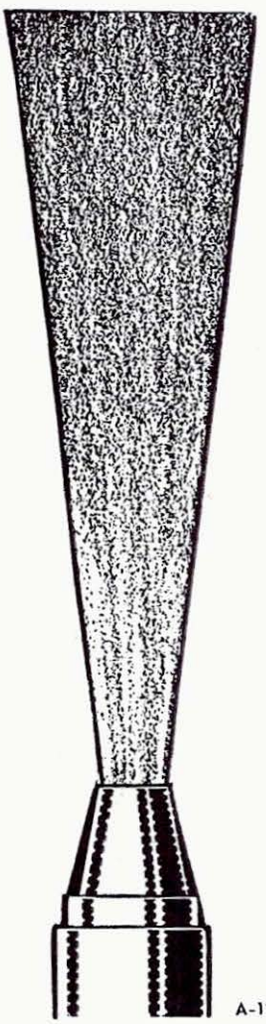

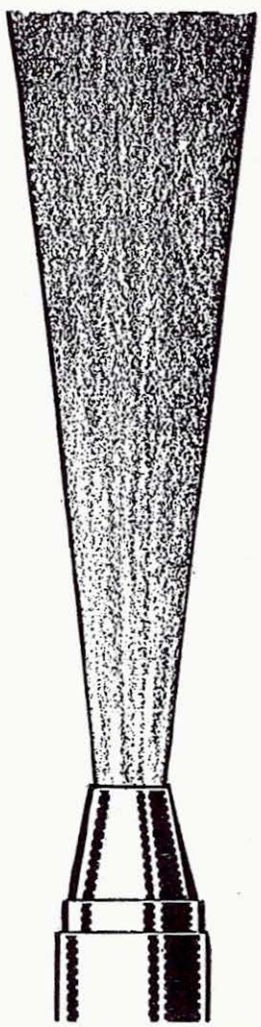

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Punxsutawney, has been transferred to Connellsville, Pa., on the Pittsburgh division, succeeding **Guy Long,** who in turn has been transferred to Akron, succeeding Mr. Kearfott.

Gunnar Tornes, superintendent of bridges and buildings of the Chicago, Milwaukee, St. Paul & Pacific, with headquarters at Chicago, has retired after 40 years of service.

J. L. Loida, assistant chief engineer of the Illinois Terminal, at St. Louis, Mo., has been promoted to chief engineer, with the same headquarters, succeeding **J. I. Catherman,** who has retired after 34 years of service.

I. H. Schram, chief engineer, maintenance of way, of the Erie, at Cleveland, Ohio, has been promoted to chief engineer, system, with the same headquarters, succeeding **J. W. Smith,** who has retired after 42 years of service with the Erie. **Charles H. Splitstone,** assistant chief engineer, at Cleveland, has retired after 40 years of service. **B. Blowers,** engineer, maintenance of way, at Youngstown, Ohio, has been promoted to chief engineer, maintenance of way, with headquarters at Cleveland, succeeding Mr. Schram. **H. J. Weccheider,** division engineer at Jersey City, N. J., succeeds Mr. Blowers as engineer, maintenance of way, at Youngstown. **L. H. Jentoft,** division engineer at Salamanca, N. Y., has been transferred to Jersey City to replace Mr. Weccheider. **Louis Rossman,** division engineer at Dunmore, Pa., has been transferred to Salamanca, where he replaces Mr. Jentoft. **R. J. Pierce,** assistant division engineer at Marion, Ohio, succeeds Mr. Rossman as division engineer at Dunmore. **J. G. Ainey,** track supervisor at Hornell, N. Y., replaces Mr. Pierce as assistant division engineer at Marion.

G. E. Shaw, whose appointment as engineer of bridges for the Canadian Pacific, with headquarters at Montreal, Que., was announced in the June 29 issue of *Railway Age,* was born at Windsor, Ont., and was graduated from McGill University (M. S., civil engineering). He entered railroading in 1925 as a draftsman for the Canadian Pacific at Montreal, and advanced to become assistant engineer of bridges in 1941. He maintained this post at the time of his recent advancement.

G. E. Shaw

MECHANICAL

R. B. Hunt, superintendent motive power and machinery of the Florida East Coast, has been appointed chief mechanical officer, with headquarters as before at St. Augustine, Fla., and his former office abolished.

Alfred G. Hoppe, whose promotion to general superintendent of the locomotive and car departments of the Chicago, Milwaukee, St. Paul & Pacific, with headquarters at Milwaukee, Wis., was reported in the *Railway Age* of June 1, was born at Milwaukee on May 9, 1895, and is a graduate of the University of Wisconsin. He entered railway service on October 15, 1919, as a mechanical draftsman at Milwaukee, and one year later was assigned to the test department where he was advanced to engineer of tests in December, 1927. In March, 1936, Mr. Hoppe was promoted to assistant mechanical engineer, with the same headquarters, and six years later he became assistant to the mechanical assistant to the chief operating officer, also at Milwaukee. In December, 1944, he was advanced to assistant chief mechanical officer, the position he held at the time of his new appointment.

Alfred G. Hoppe

SPECIAL

P. E. Geil, passenger traffic manager of the Gulf, Mobile & Ohio at Mobile, Ala., has been appointed vice-president, traffic, of the Gulf Transport Company (a subsidiary of the G. M. & O.) with the same headquarters.

John R. Grove, vice-president and general manager, **R. E. Patterson,** chief engineer, and **J. F. Yerger,** superintendent of telegraph and signals, all officers of the Lehigh Valley who have been located at Bethlehem, Pa., now have their headquarters at 143 Liberty street, New York, 6.

OBITUARY

Arthur G. Holt, who retired in 1938 as assistant to the chief engineer of the Chicago, Milwaukee, St. Paul & Pacific, died in Evanston, Ill., on June 28.

Clarence L. Persons, who retired in December, 1945, as assistant to the executive vice-president of the Chicago, Burlington & Quincy, with headquarters at Chicago, died at his home in Waukegan, Ill., on June 30. A sketch of Mr. Persons' career appeared in the *Railway Age* of January 26 in connection with his retirement.

Edward W. Weast, who retired in 1945 as freight claim agent of the Chicago & Eastern Illinois at Chicago, died at St. Petersburg, Fla., on June 26. Mr. Weast was born at Polo, Ill., on November 19, 1880, and entered railway service with the Chicago, Burlington & Quincy in February, 1902. In September of the same year he went with the Chicago Belt, handling undercharges, demurrage and adjustment of relief claims, with headquarters at Chicago. Three years later he was advanced to freight claim investigator, with the same headquarters. In 1909 Mr. Weast went with the C. & E. I., as an investigator of loss and damage claims at Chicago, and a short time later he was promoted to chief clerk of the freight claim department. In July, 1943, he was advanced to the position he held at the time of his retirement.

* * *

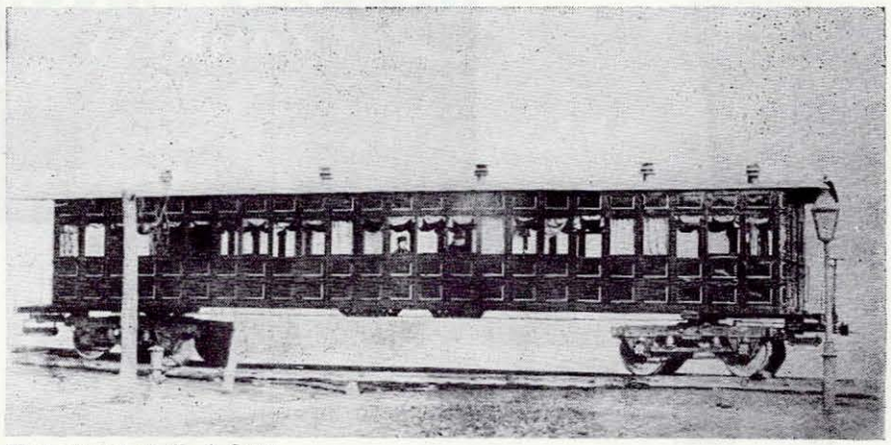


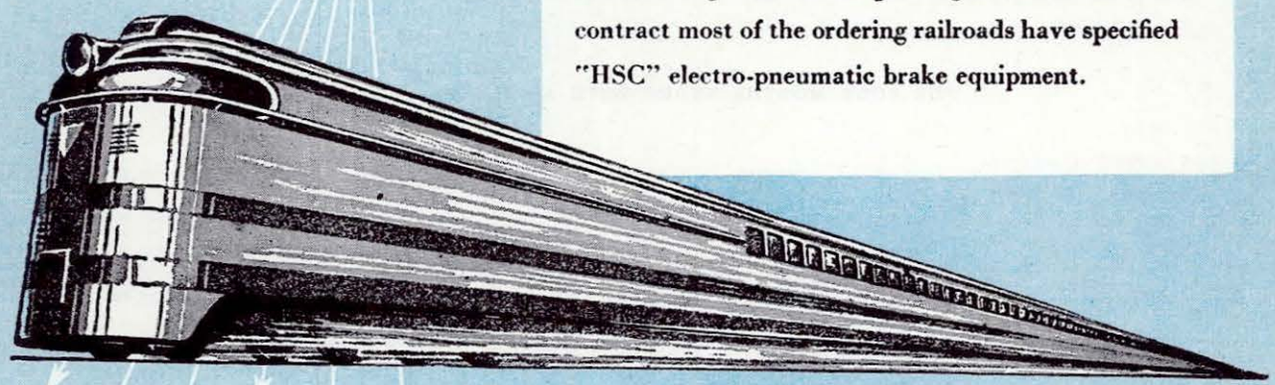
Photo courtesy of W. A. Lucas

La Mothe's "patent iron car" in use on the Erie in 1861

How will Atomic Power affect "HSC" Brakes for Passenger Trains?

Your guess is as good as ours! But there is no guessing about the immediate future. The "HSC" electro-pneumatic brake is a development through a decade of actual operation. It has the necessary elements for safe and smooth operation of passenger trains. It is just as much a part of the modern passenger car as beautiful finish and luxurious appointments. Though "sight unseen" its smooth handling is the soothing touch to passenger comfort.

For the large number of passenger cars now under contract most of the ordering railroads have specified "HSC" electro-pneumatic brake equipment.



For your new-era passenger cars, specify complete "HSC" control.

Electro-Pneumatic—improves schedules with flexibility and smoothness

Speed Governor Control—for control of high braking forces

"AP" Decelostat—for anti-wheel sliding protection

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Wilmerding, Pa.

Operating Revenues and Operating Expenses of Class I Steam Railways

Compiled from 129 monthly reports of revenues and expenses representing 133 Class I steam railways

(Switching and Terminal Companies Not Included)

FOR THE MONTH OF APRIL, 1946 AND 1945

Item	United States		Eastern District		Southern District		Western District	
	1946	1945	1946	1945	1946	1945	1946	1945
Miles of road operated at close of month	227,800	228,290	55,975	56,005	43,286	43,329	128,539	128,956
Revenues:								
Freight	$411,819,296	$593,906,857	$155,668,403	$229,876,117	$75,543,616	$114,114,656	$180,607,277	$249,916,084
Passenger	106,082,233	129,202,294	49,172,585	53,534,683	18,815,633	25,422,607	38,094,015	50,245,004
Mail	10,745,639	10,656,783	3,846,330	3,543,500	1,832,889	1,901,990	5,066,420	5,211,293
Express	9,870,095	14,148,773	1,302,070	3,893,397	1,620,132	2,188,737	6,947,893	8,066,639
All other operating revenues	28,184,237	30,659,583	13,343,585	13,258,348	3,785,096	4,138,420	11,055,556	13,262,815
Railway operating revenues	566,701,500	778,574,290	223,332,973	304,106,045	101,597,366	147,766,410	241,771,161	326,701,835
Expenses:								
Maintenance of way and structures	96,690,438	105,964,770	34,111,056	37,425,496	20,050,234	19,054,837	42,529,148	49,484,437
Depreciation	9,965,966	9,779,672	4,345,090	4,262,714	1,614,059	1,629,518	4,006,817	3,887,440
Retirements	861,522	699,024	208,315	135,178	198,284	223,349	454,923	340,497
Deferred maintenance	*557,020	*617,153	*161,428	*195,833	*14,195		*381,397	*421,320
Amortization of defense projects	55,893	2,148,322	12,095	644,434	22,493	373,854	21,305	1,130,034
Equalization	*1,739,406	658,081	*703,711	*40,584	*339,711	377,826	*695,984	320,839
All other	88,103,483	93,296,824	30,410,695	32,619,587	18,569,304	16,450,290	39,123,484	44,226,947
Maintenance of equipment	121,075,868	136,949,605	51,775,510	56,230,520	21,232,105	25,979,576	48,068,253	54,739,509
Depreciation	18,514,965	17,927,924	7,870,367	7,581,557	3,664,402	3,578,464	6,980,196	6,767,903
Retirements	*30,857	*7,813	*5,752	1,045	*14,792	*3,513	*10,313	*5,345
Deferred maintenance and major repairs	*292,936	*194,804	*34,504	*8,973	*51,741		*206,691	*185,831
Amortization of defense projects	637,853	17,712,417	292,868	5,925,633	60,791	4,293,822	284,194	7,492,972
Equalization	178,827	58,449	*53,953	*22,341	170,686	81,966	62,094	*1,176
All other	102,068,016	101,453,432	43,706,484	42,753,609	17,402,759	18,028,837	40,958,773	40,670,986
Traffic	13,699,143	11,871,270	5,058,889	4,250,280	2,550,457	2,225,954	6,089,797	5,395,036
Transportation—Rail line	246,645,901	250,242,590	107,032,080	112,044,701	41,978,416	42,471,970	97,635,405	95,725,919
Transportation—Water line		13						13
Miscellaneous operations	9,995,090	9,476,538	3,910,304	3,417,915	1,443,047	1,493,752	4,641,739	4,564,871
General	19,991,041	16,982,639	7,805,316	6,864,344	3,985,157	3,310,578	8,200,568	6,807,717
Railway operating expenses	508,097,481	531,487,425	209,693,155	220,233,256	91,239,416	94,536,667	207,164,910	216,717,502
Net revenue from railway operations	58,604,019	247,086,865	13,639,818	83,872,789	10,357,950	53,229,743	34,606,251	109,984,333
Railway tax accruals	36,010,093	135,209,861	13,426,784	34,578,175	7,074,706	33,708,184	15,508,603	66,923,502
Pay-roll taxes	20,559,025	19,204,165	8,521,980	8,051,746	3,598,927	3,315,501	8,438,118	7,836,918
Federal income taxes	*6,620,988	91,447,691	*4,248,564	16,474,636	*886,399	25,267,485	*1,486,025	49,705,570
All other taxes	22,072,056	24,558,005	9,153,368	10,051,793	4,362,178	5,125,198	8,556,510	9,381,014
Railway operating income	22,593,926	111,877,004	213,034	49,294,614	3,283,244	19,521,559	19,097,648	43,060,831
Equipment rents—Dr. balance	9,270,299	13,366,269	4,522,340	7,902,795	386,214	521,077	4,361,745	4,942,397
Joint facility rent—Dr. balance	3,195,888	3,445,409	1,656,933	1,755,733	343,388	417,382	1,195,567	1,272,294
Net railway operating income	10,127,739	95,065,326	*5,966,239	39,636,086	2,553,642	18,583,100	13,540,336	36,846,140
Ratio of expenses to revenues (per cent)	89.7	68.3	93.9	72.4	89.8	64.0	85.7	66.3

FOR FOUR MONTHS ENDED WITH APRIL, 1946 AND 1945

Item								
Miles of road operated at close of month	227,799	228,300	55,971	56,008	43,285	43,331	128,543	128,961
Revenues:								
Freight	$1,770,243,906	$2,311,557,367	$674,613,619	$871,753,710	$364,024,344	$456,780,296	$731,605,943	$983,022,361
Passenger	472,901,518	527,932,125	202,793,927	215,676,243	83,715,864	106,987,506	186,391,727	205,268,376
Mail	41,429,832	42,385,185	14,405,408	14,096,207	7,190,857	7,528,909	19,833,507	20,762,979
Express	32,943,518	54,695,744	3,471,585	16,229,094	5,810,766	8,398,044	23,661,167	30,068,606
All other operating revenues	115,296,107	118,238,398	53,177,552	51,974,650	15,991,919	16,834,168	46,126,636	49,429,580
Railway operating revenues	†432,814,881	†3,054,808,819	948,462,151	1,169,727,994	476,733,750	596,528,923	1,007,618,980	1,288,551,902
Expenses:								
Maintenance of way and structures	374,155,879	400,038,820	133,231,789	146,852,899	78,639,613	72,990,429	162,284,477	180,195,492
Depreciation	39,892,847	38,717,560	17,264,628	16,987,663	6,436,111	6,230,017	16,192,108	15,499,880
Retirements	2,275,979	1,859,391	423,067	401,548	389,570	462,046	1,463,342	995,797
Deferred maintenance	*1,813,548	*1,452,373	*236,982	*322,830	*438,463		*1,138,103	*1,129,543
Amortization of defense projects	60,950	8,475,715	43,724	2,583,601	19,390	1,444,402	*2,164	4,447,712
Equalization	12,807,764	16,856,394	6,873,901	9,113,290	2,287,810	3,949,232	3,646,053	3,793,872
All other	320,931,887	335,582,133	108,863,451	118,089,627	69,945,195	60,904,732	142,123,241	156,587,774
Maintenance of equipment	492,870,292	544,334,241	207,883,414	222,088,188	90,041,709	103,527,448	194,945,169	218,718,605
Depreciation	73,640,845	71,415,691	31,054,646	30,093,143	14,710,020	14,313,655	27,876,179	27,008,893
Retirements	*165,021	*19,108	*68,070	*8,099	*52,722	*8,800	*44,229	*2,269
Deferred maintenance and major repairs	*1,244,517	*561,360	*133,937	*10,108	*237,069		*873,511	*551,260
Amortization of defense projects	2,277,819	69,143,948	1,016,184	22,934,566	332,094	16,709,166	929,541	29,500,216
Equalization	1,220,543	554,014	*33,180	*23,099	1,085,849	450,888	167,874	126,225
All other	417,140,623	403,801,056	176,047,771	169,101,777	74,203,537	72,062,539	166,889,315	162,636,740
Traffic	53,557,209	46,844,441	19,411,592	16,715,703	10,171,645	8,863,855	23,973,972	21,264,883
Transportation—Rail line	1,035,357,554	1,007,366,051	453,861,428	455,068,608	181,078,110	171,508,200	400,418,016	380,789,243
Transportation—Water line		995						995
Miscellaneous operations	41,773,289	38,238,304	16,390,700	14,106,018	6,010,222	6,071,241	19,372,367	18,061,045
General	78,553,561	68,756,879	31,332,975	27,770,995	15,646,500	13,248,326	31,574,086	27,737,558
Railway operating expenses	2,076,267,784	2,105,579,731	862,111,898	882,602,411	381,587,799	376,209,499	832,568,087	846,767,821
Net revenue from railway operations	356,547,097	949,229,088	86,350,253	287,125,583	95,145,951	220,319,424	175,050,893	441,784,081
Railway tax accruals	190,762,670	545,810,822	60,696,518	132,160,881	50,402,167	140,370,235	79,663,985	273,279,706
Pay-roll taxes	84,797,473	76,556,735	35,452,734	32,319,924	15,219,470	13,288,458	34,125,269	30,948,353
Federal income taxes	17,591,846	371,659,027	*11,356,258	59,634,285	17,170,066	106,528,217	11,778,038	205,496,525
All other taxes	88,373,351	97,595,060	36,600,042	40,206,672	18,012,631	20,553,560	33,760,678	36,834,828
Railway operating income	165,784,427	403,418,266	25,653,735	154,964,702	44,743,784	79,949,189	95,386,908	168,504,375
Equipment rents—Dr. balance	34,908,897	44,947,010	15,719,137	24,927,204	*1,509,323	489,921	20,699,083	19,529,885
Joint facility rent—Dr. balance	12,041,156	13,525,949	6,286,889	6,742,305	1,465,385	1,447,805	4,288,882	5,335,839
Net railway operating income	118,834,374	344,945,307	3,647,709	123,295,193	44,787,722	78,011,463	70,398,943	143,638,651
Ratio of expenses to revenues (per cent)	85.3	68.9	90.9	75.5	80.0	63.1	82.6	65.7

* Decrease, deficit, or other reverse item.

† Railway operating revenues are after deduction of $887,806 for the four months ended with April 1946 and $13,727,451 for the four months ended with April 1945 to create a reserve for land grant deductions in dispute.

Compiled by the Bureau of Transport Economics and Statistics, Interstate Commerce Commission. Subject to revision.

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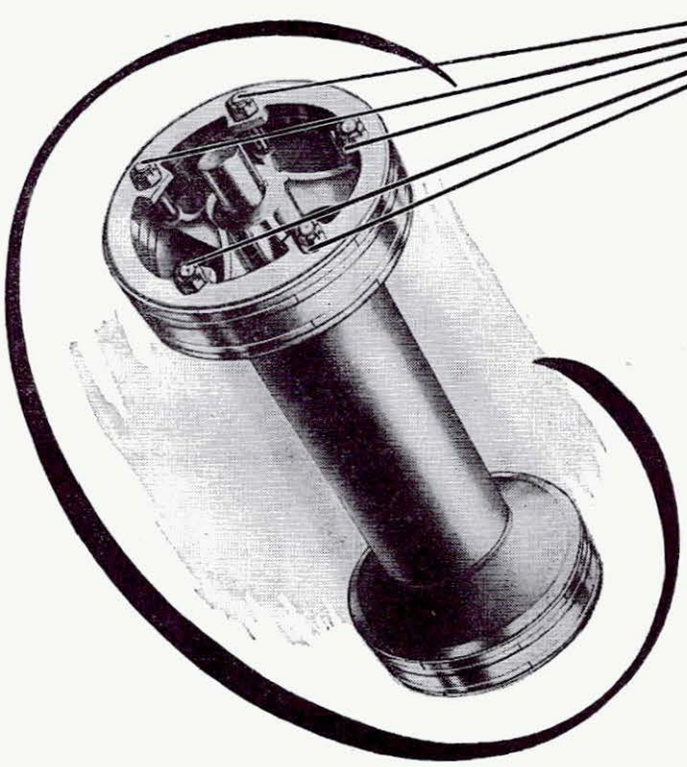

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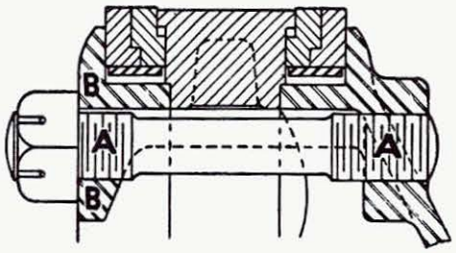

Cross section of valve packing and bull rings showing butt-welded stud bolt (A) and follower ring (B)

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Current Publications

PAMPHLETS

How Can the Air Cargo Carrier Use the Services of a Freight Forwarder?, by L. H. Brittin. 20 pages. Published by Edward S. Evans Transportation Research, 435 Woodward Building, Washington 5, D. C. Free.

This pamphlet is an enlargement of a report made by Col. Brittin to the Second Joint Air Transport Users' Conference in Washington, D. C., on March 12, 1946. The position of the freight forwarder, or freight consolidator, in air transportation is not entirely clear at the present time. A general freight consolidating service can be conducted only under a certificate of convenience and necessity issued by the Civil Aeronautics Board for that purpose. The pamphlet points out, however, that a limited air freight consolidating service can be conducted on a non-scheduled basis or on a contract basis, under certain conditions. It suggests that there should be established a classification of air carriers, known as air freight consolidators, and that this class of carriers should be exempted from certain provisions of the Civil Aeronautics Act.

Pennsylvania Railroad's 100th Anniversary and Lehigh Valley Railroad's 100th Anniversary. Four pages each. Special editions of Business Machines, dated April 13, 1946, and April 30, 1946, respectively. Published by International Business Machines Corporation, 590 Madison Ave., New York, N. Y. Free.

Outlines and pictures the history and development of these companies.

They Had Seven Months. 22 Pages. Published by the Netherlands Railways, Utrecht, Holland.

This booklet illustrates and describes what happened to the Netherlands Railways under German domination. From the time the country was invaded in May, 1940, until September, 1944, when the railway men went on strike against the Germans, the lines remained intact. Then, when the strike occurred and the railway men went underground, the Germans began a systematic destruction of the lines. The booklet concludes with a section illustrating what has been done to restore the lines, and emphasizes the need for equipment and materials.

Georgia Railroad & Banking Company, 1833-1945; An Historic Narrative, by Mary G. Cumming. 111 pages. Printed by the Walton Printing Company, Augusta, Ga.

A history of the company, based for the most part on material taken from the "minutes of the stockholders' and directors' meeting augmented by old diaries and letters, by folklore and tradition, by clippings and reprints that date back more than a century".

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Facts for Industry List of Publications. Index of Products Covered. May, 1946. 44 pages. Prepared by the Bureau of the Census, Industry Division, Washington 25, D. C.

This catalog lists all Facts for Industry releases available as of May 1, 1946, from the Current Manufactures Statistics Program of the Census Bureau. It includes releases of information collected by or for the War Production Board and the Civilian Production Administration during the war and reconversion periods by the Census Bureau or other federal agencies.

The Facts for Industry series makes available to manufacturers, trade groups, and other users of industrial data current figures that are useful to them in their day-to-day operations and forward planning. In addition to an up-to-date list of publications in the series, this catalog provides an alphabetical index of over 3,000 products for which current or wartime information is available.

Chaos in the Grain Trades. 47 pages. Published by the National Association of Commodity Exchanges and Allied Trades, Inc., 141 W. Jackson Boulevard, Chicago, Ill. Free.

This pamphlet contains statements on the world grain crisis presented before the Senate Committee on Agriculture on April 23-24, 1946, by outstanding representatives of grain and milling trades and exchanges, with recommendations for correction of black market conditions and restoration of free markets.

American Standards Association 1945-46 Year Book. 112 pages. Published by the American Standards Association, 70 E. 45th Street, New York 17, N. Y. Free.

This is the first edition of this Year Book to be issued in several years. It contains a list of the officers and members of the association, a list of the members of the Standards Council, a review of the work of the association, a chart showing its setup, a list of, and an index to, approved American standards and projects under development, the association's constitution and by-laws, and an address list of officers, committee members, member-bodies and associate members.

Summary Table of Statistical Returns of Railways of Great Britain, 1938 to 1944. 9 pages. Printed and published by His Majesty's Stationery Office, York House, Kingsway, London, W. C. 2, England. Can be ordered in this country through the British Information Services, 30 Rockefeller Plaza, New York 20, N. Y. Price, 10 cents.

1938 was the last year for which annual statistical returns of the British railways were published. Due to the fact that, during the war, it was necessary for the rail-

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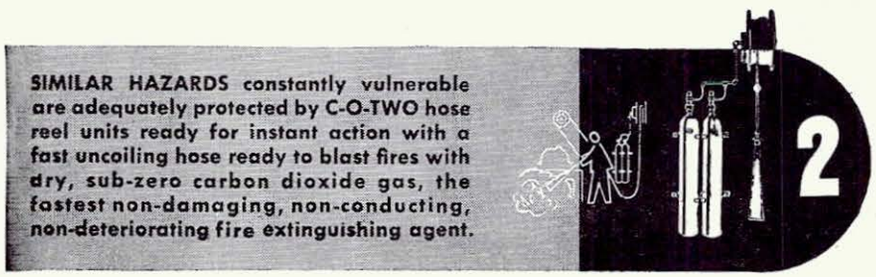
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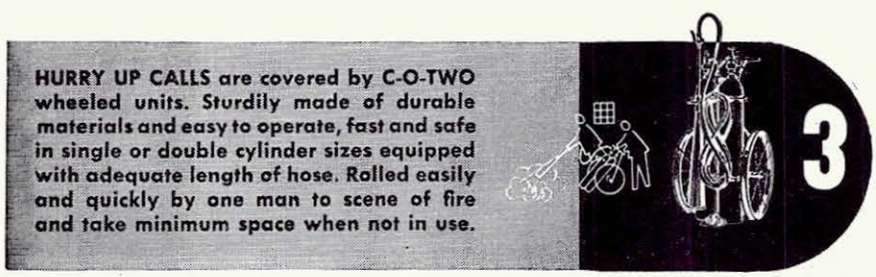
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roads to suspend the collection of some of the information they normally kept and to make certain changes in the basis of other particulars, it was not possible to provide a continuous record covering the war years of all the particulars previously published. Statistics in the present compilation include those on road mileage, equipment, traffic and train and engine mileage.

Catalog of American Standards. 23 pages. Published by the American Standards Association, 70 E. 45th Street, New York 17, N. Y. Free.

This booklet constitutes a revised list of standards approved to date by the American Standards Association. The 845 standards listed include definitions of technical terms, specifications for metals and other materials, dimensions, safety provisions for the use of machinery, methods of work and methods of test for the finished product. The standards are widely used throughout industry since they represent agreement on the part of maker, seller and user groups as to the best possible practice at the time of approval. The 154 American war standards listed are now being reconsidered for their possible value as American standards in connection with peacetime production.

The Transport Situation in Europe, compiled by the European Central Inland Transport Organization, 40 Grosvenor Square, London, W.1, England. No. 6, March, 1946, 56 pages. Price, five shillings.

Outlines transport developments in the various European countries and brings up to date the statistics on cars and locomotives and traffic.

Books

State Management & Control of Railways in India; A Study of Railway Finance, Rates and Policy During 1920-37, by L. A. Natesan. 496 pages. Published by University of Calcutta, Calcutta, India. Price, approximately $3.60.

This study was undertaken to examine the results of state management of Indian railways during 1924-37. It attempts a critical review of the working of the Separation Convention, which essayed the task of reconciling state management with commercial principles of operation. It contains many statistical series, a bibliography and a detailed index.

Trains, Tracks and Travel, by T. W. Van Metre. Seventh Edition, 423 pages, illustrations. Published by Simmons-Boardman Publishing Corporation, 30 Church Street, New York 7, N. Y. Price, $3.50.

This book tells the story of the development of the railroad network during the past century. The reader is told how a railroad is built, how trains are made up, how passengers are made comfortable on transcontinental trips, how our railroads went to war and many other things that are involved in the operations of the railroads. While the book was originally written for boys it has evolved into one with enough detail to be of general adult interest. The book is well illustrated and several new photographs have been included in this edition.

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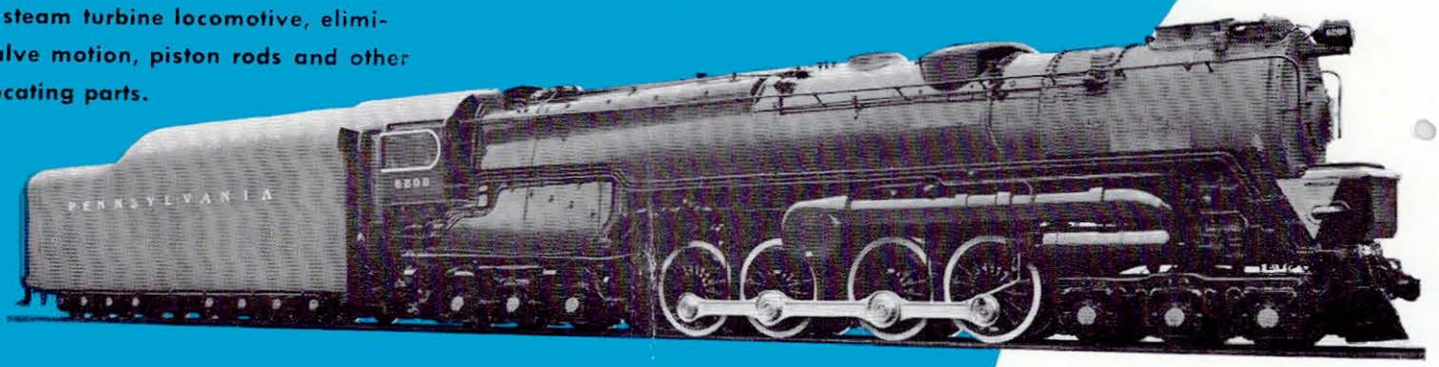

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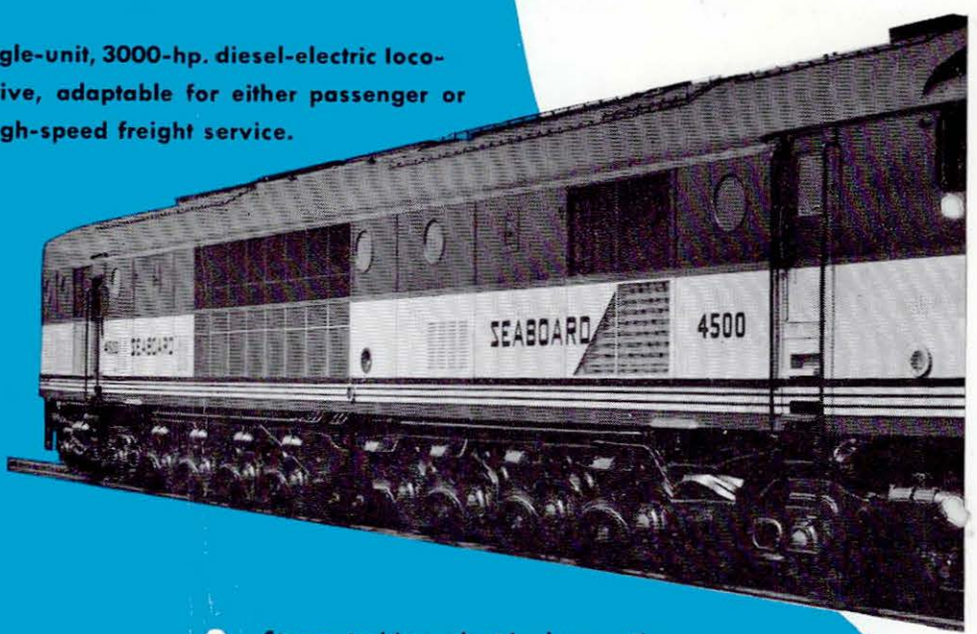

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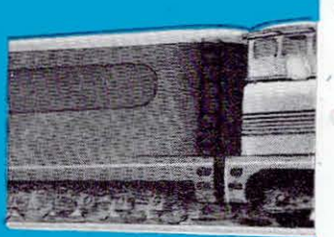

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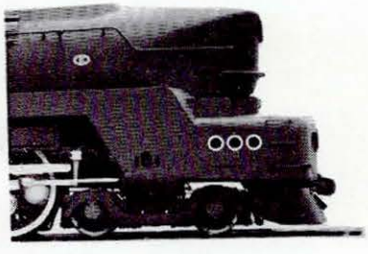

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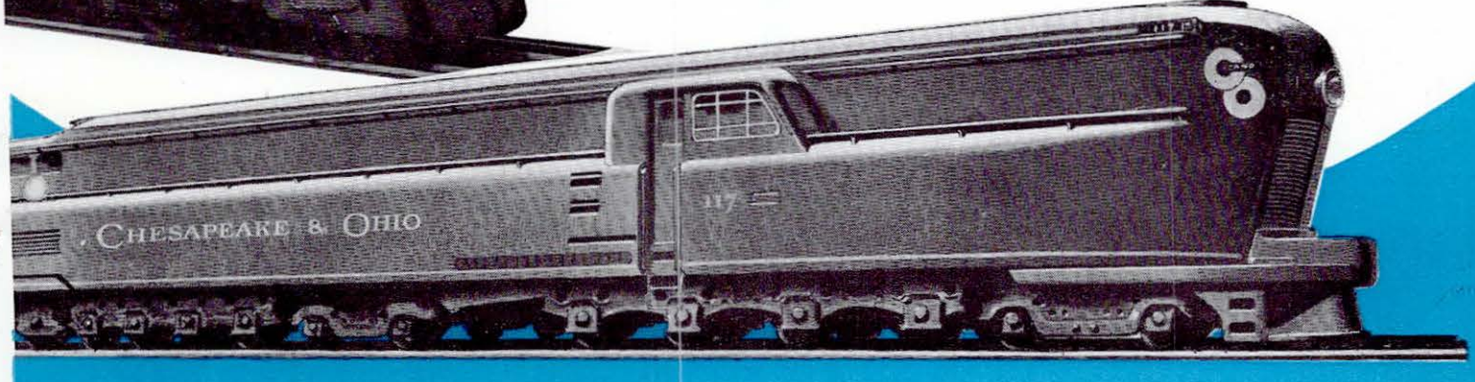

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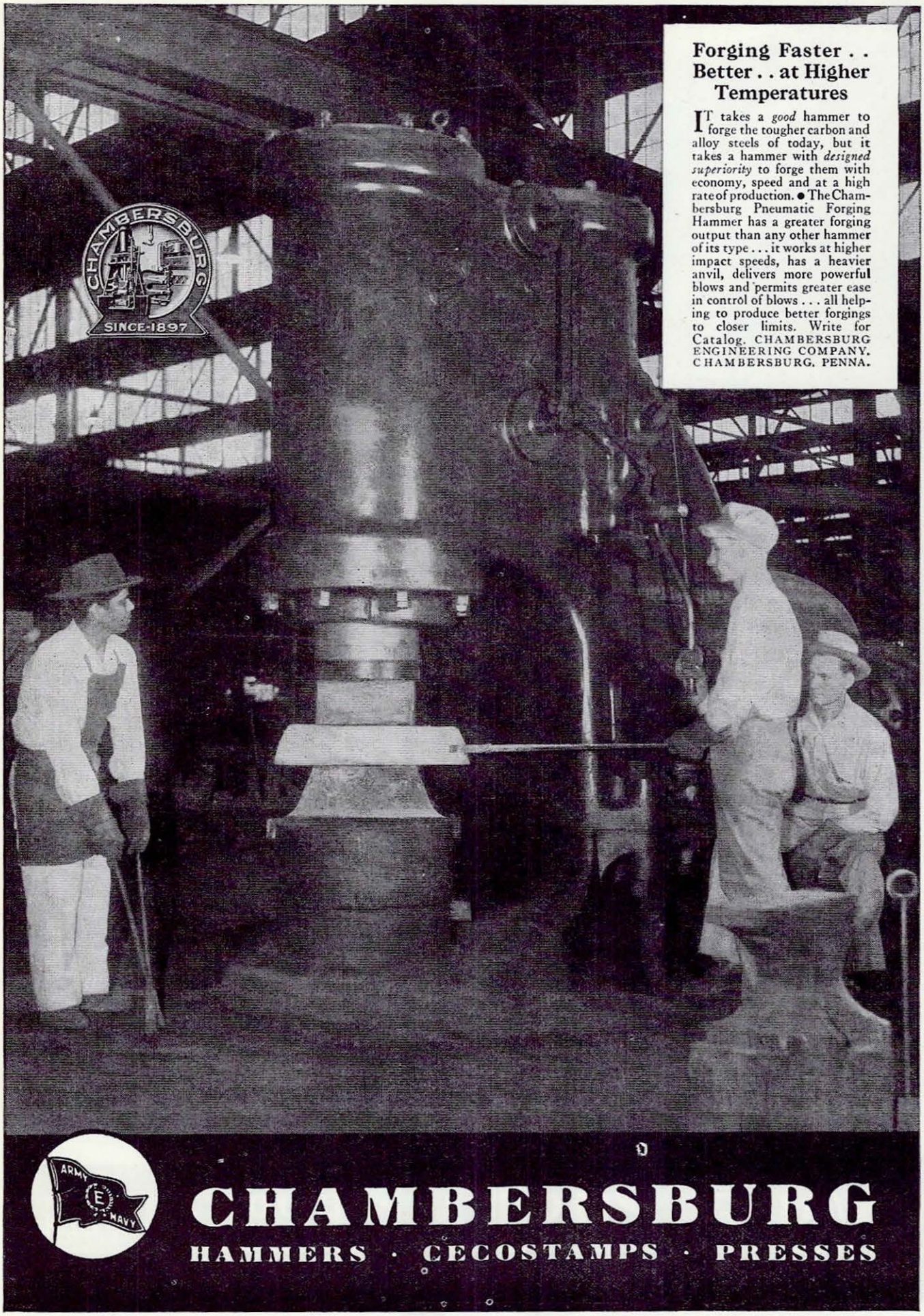
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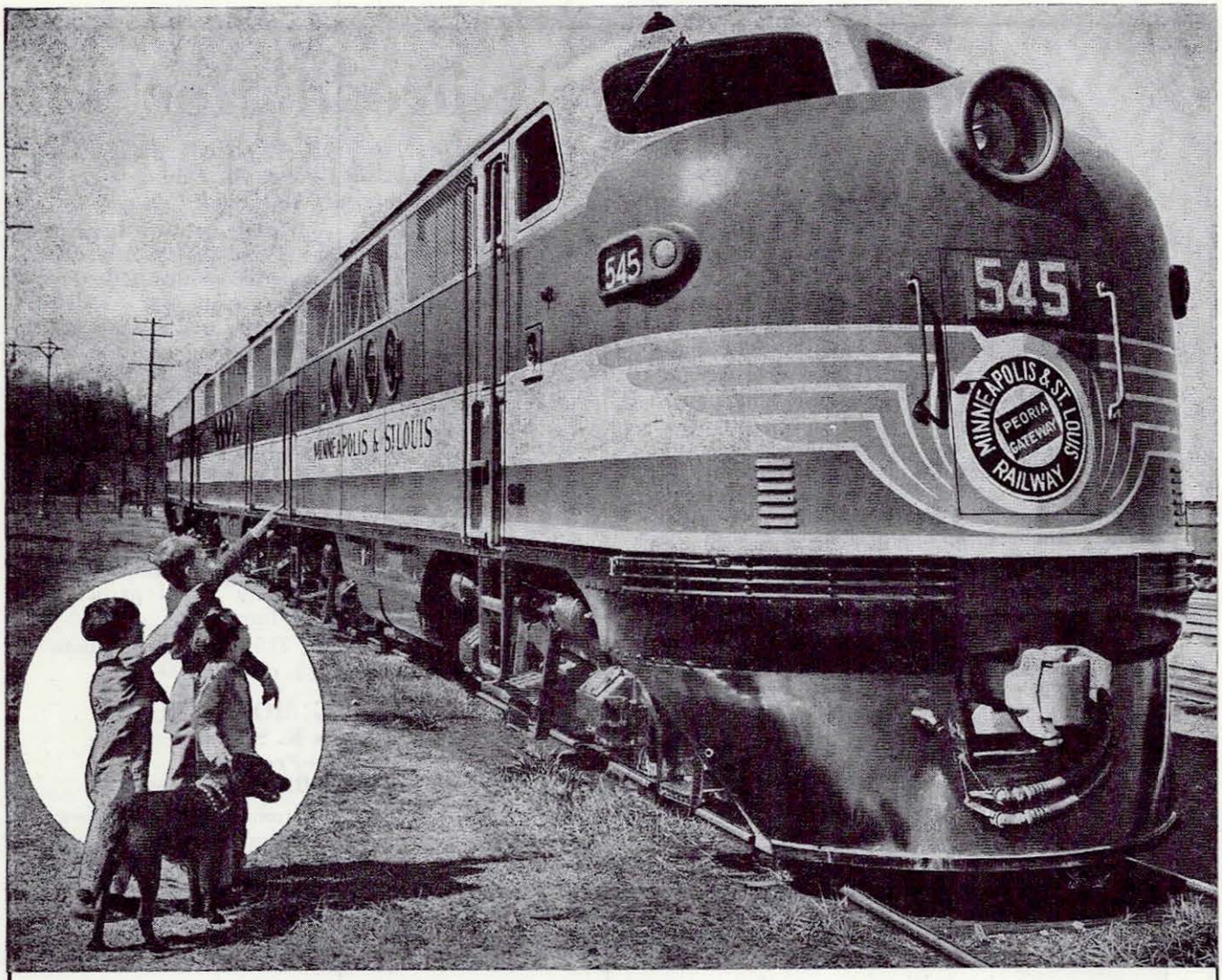

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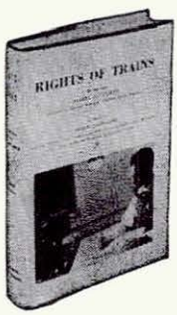

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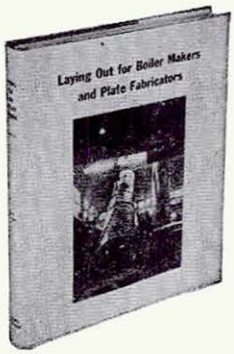

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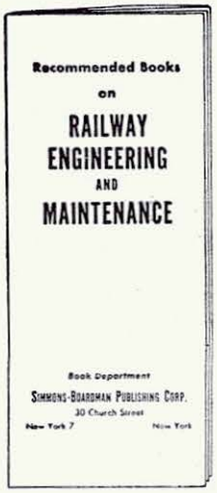

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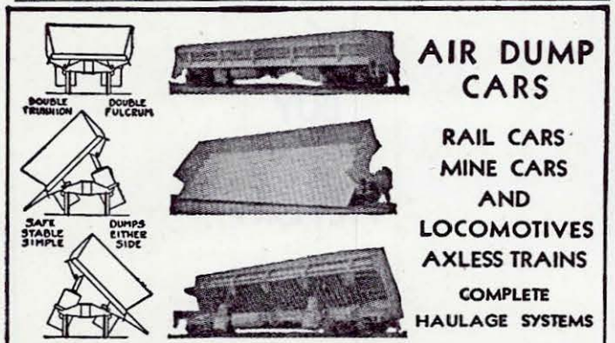

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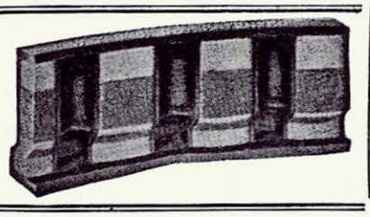

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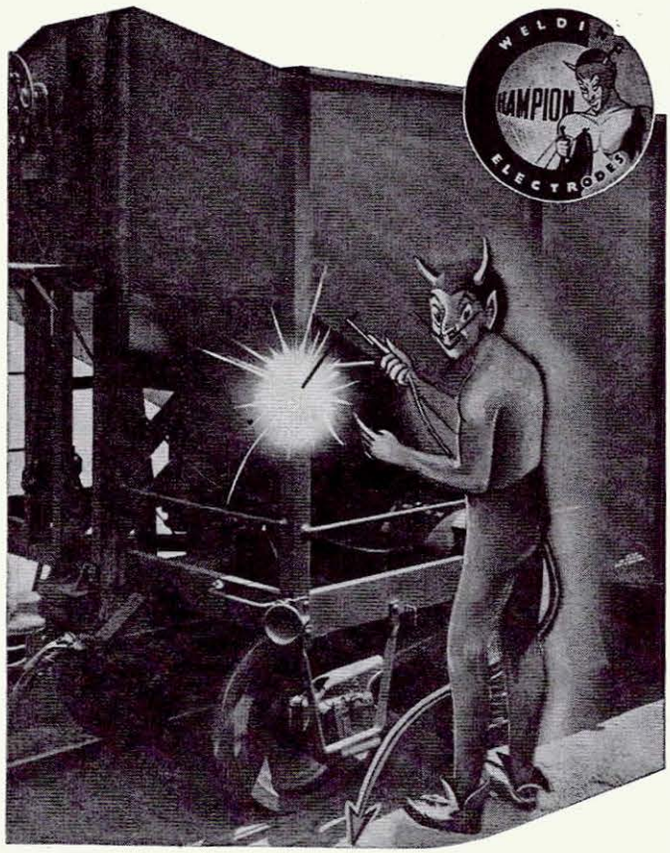

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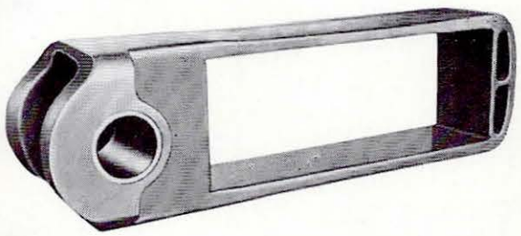

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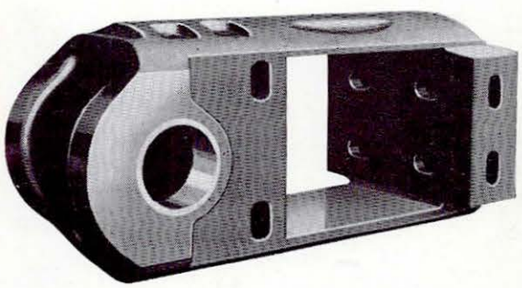

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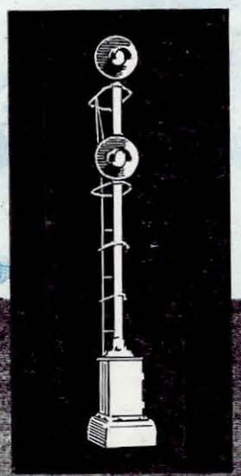

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